The Commonwealth of Massachusetts

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DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 12-120-C December 22, 2014

Investigation by the Department of Public Utilities on its own motion regarding the service quality guidelines established in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 99-84 (2001) and amended in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 04-116 (2007).

ORDER ADOPTING REVISED SERVICE QUALITY GUIDELINES

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I. PREFACE

With this Order, the Department adopts new service quality standards. As we discussed in Service Quality, D.P.U 12-120-B, the overarching purpose of revising the SQ Guidelines is to require improved performance by gas and electric distribution companies in the Commonwealth. The revised SQ Guidelines accomplish this goal in the following ways: (1) shifting from a paradigm of no degradation of service to improved service quality; (2) establishing new approaches for calculating penalty thresholds, including the "glide path" method through which performance standards become increasingly stringent over time; (3) eliminating offsets to ensure that companies provide high levels of service in all dimensions of service quality; (4) establishing statewide standards applicable to all companies; (5) updating the standards to eliminate unnecessary and outdated metrics; and (6) adding new metrics to align company incentives with important policy objectives. These changes to the Department's service quality standards mark a sea change in the level of service quality electric and gas customers in the Commonwealth can expect.

II. INTRODUCTION

On December 11, 2012, pursuant to G.L. c. 164, §§ 1E and 1I, the Department of Public Utilities ("Department") voted to open an investigation into the service quality ("SQ") of electric and gas local distribution companies ("the Electric and Gas Companies," collectively "Companies"),[1] and docketed the matter as D.P.U. 12-120. In opening the investigation, we stated our intention to consider changes to improve service quality.

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1 In this Order, we may refer separately to Electric Companies and Gas Companies, as appropriate. A combined electric and gas utility is considered both an Electric Company and a Gas Company for purposes of this Order.

The Department invited comments on a variety of topics related to SQ and provided for a 60-day initial comment period and a 30-day reply comment period.[2] On December 13, 2012, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed comments in the form of a report entitled Recommendations for Strengthening the Massachusetts Department of Public Utilities Service Quality Standards. On February 22, 2013, the Attorney General filed a Notice of Retention of Experts and Consultants pursuant to G.L. c. 12, § 11E(b), which was granted by the Department on March 21, 2013.

On March 15, 2013, the Department received comments from Bay State Gas Company d/b/a Columbia Gas of Massachusetts ("CMA"); The Berkshire Gas Company ("Berkshire Gas"); Blackstone Gas Company ("Blackstone"); Boston Gas Company, Colonial Gas Company, Massachusetts Electric Company, and Nantucket Electric Company each d/b/a National Grid ("National Grid"); Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities (formerly known as New England Gas or NEGC) ("Liberty Utilities");[3] NSTAR Electric Company, Western Massachusetts Electric Company, and NSTAR Gas Company each d/b/a Northeast Utilities ("Northeast Utilities"); Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"); Department of Energy Resources ("DOER"); Cape Light Compact ("Compact"); National Consumer Law Center; Low-Income Weatherization and Fuel Assistance

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2 On January 22, 2013, and then again on February 26, 2013, the Hearing Officer granted motions for extensions of time, which ultimately extended the initial comment deadline to March 15, 2013, and the reply comment deadline to May 16, 2013.

3 Subsequent to the initiation of this proceeding, the Department approved a merger between New England Gas Company and Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities. New England Gas Company, D.P.U. 13-07-A at 131-132 (2013).

Program Network ("Low-income Network"); United Steelworkers Local 12003 ("United Steelworkers"); New England Gas Workers Association ("NEGWA"); Solar Energy Industries Association; and My Generation Energy, Inc. ("My Generation").

On May 16, 2013, the Department received reply comments from the Attorney General, Berkshire Gas, CMA, National Grid, Northeast Utilities, Liberty Utilities, DOER, the Compact, Conservation Law Foundation, and My Generation. Pursuant to a June 12, 2013 Hearing Officer ruling, CMA, Northeast Utilities, and National Grid also filed supplemental reply comments. On July 10, 2013, the Attorney General filed supplemental reply comments. The Department conducted several rounds of discovery.

On July 11, 2014, the Department proposed new Service Quality Guidelines ("Proposed SQ Guidelines") and invited comment. Service Quality Investigation, D.P.U. 12-120-B (July 11, 2014). On July 23, 2014, the Companies jointly filed a Motion for Additional Process. In their motion, the Companies requested: (1) extension of the deadline for filing initial comments on the Proposed SQ Guidelines from August 11, 2014 to August 26, 2014; (2) scheduling of hearings and/or transcribed technical sessions following the submission of initial comments; and (3) establishment of deadlines for initial and reply comments following the hearing process. The Hearing Officer extended the deadline for initial and reply comments, as requested, and notified the parties that transcribed technical sessions would be scheduled after the Department received the participants' comments. The Comments submitted in response to the Department's Proposed SQ Guidelines, filed on August 26, 2014, will hereinafter be referred to as Initial Comments. The Comments submitted in reply to the Initial Comments, filed on September 10, 2014, will hereinafter be referred to as Reply Comments.[4] The Department held technical sessions on October 14 and 15, 2014. The Department provided participants the opportunity to submit an additional round of comments after the technical sessions.[5] The Comments submitted after the technical sessions, filed on November 5, 2014, will hereinafter be referred to as Second Reply Comments.[6]

The Department appreciates the thoughtful comments from participants. This Order incorporates many of those comments, and makes revisions to our Proposed SQ Guidelines. In Section III, we address the Department's SQ penalty authority. In Section IV we discuss the overarching elements of the penalty mechanism we will adopt in this proceeding. These include improving standards, the discontinuation of offsets, and the use of statewide benchmarks. In Sections V-X we discuss specific changes to our proposed metrics and explain the final metrics that will be adopted in this proceeding. Finally, we adopt final revised SQ Guidelines in this Order.

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4 The following participants submitted Initial Comments: CMA, Berkshire Gas, Blackstone, National Grid, Liberty Utilities, Northeast Utilities, Unitil, Attorney General, DOER, Compact, Low-Income Network, United Steelworkers, and NEGWA. The Companies filed Joint Reply Comments. In addition, the Attorney General, the Compact, the Low-income Network, the Steelworkers Union, and Berkshire Gas filed Reply Comments.

5 The Companies sought a one-week extension of the deadline for post-tech session comments to November 5, 2014.

6 The following participants submitted Second Reply Comments: the Attorney General and Blackstone Gas. In addition, the Companies filed Joint Second Reply Comments.

III. DEPARTMENT'S AUTHORITY TO ESTABLISH PENALTIES FOR SQ

A. Introduction

The Department first issued SQ Guidelines in D.T.E. 99-84 pursuant to G.L. c. 164, § 1E, which authorized the Department to establish Performance Based Ratemaking ("PBR"), establish SQ standards, and levy penalties for violation of SQ standards. D.T.E. 99-84, at 1 (June 29, 2001), citing G.L. c. 164, § 1E (1997). In 2009, the Massachusetts General Court ("General Court") amended G.L. c. 164, adding a new section specifically requiring utility compliance with the Department's SQ standards and explicitly authorizing the Department to levy penalties against any Company that failed to meet the Department's SQ standards. See G.L. c. 164, § 1I.

B. Summary of Comments

a. Northeast Utilities/CMA

Northeast Utilities and CMA challenge the Department's authority to establish SQ penalties outside the context of a PBR plan (Northeast Utilities Initial Comments at 17-19; CMA Initial Comments at 12-14). Northeast Utilities and CMA argue that the Department must have explicit statutory authority to levy monetary penalties and that the statutory authority delegated to the Department in G.L. c. 164, § 1E applies only to SQ standards within the context of a PBR plan (Northeast Utilities Initial Comments at 17-19; CMA Initial Comments at 12-14). In support of their argument, Northeast Utilities and CMA maintain that the Department's authority to impose SQ penalties originally arose from the enactment in 1997 of the Restructuring Act, which authorized the Department to promulgate rules and regulations to establish performance based rates for each utility Company, and required the Department to establish SQ standards (Northeast Utilities Initial Comments at 17-19, citing G.L. c. 164, § 1E(a); D.T.E. 99-84, at 4

(August 17, 2000); CMA Initial Comments at 13). According to Northeast Utilities and CMA, G.L. c. 164, § 1E(c) further establishes that the Department may levy a penalty on utility companies that fail to meet the SQ standards in an amount up to and including the equivalent of two percent of such Company's transmission and distribution service revenues for the previous calendar year (Northeast Utilities Initial Comments at 18, citing G.L. c. 164, § 1E(a); D.T.E. 99-84, at 4 (August 17, 2000)). As a result, Northeast Utilities and CMA argue that the Department does not have authority to penalize the Gas and Electric Companies outside of the context of PBR plans unless the Gas or Electric Company has consented to the penalty framework by virtue of a merger transaction or settlement agreement (Northeast Utilities Initial Comments at 17-19; CMA Initial Comments at 12-14).

b. Attorney General

The Attorney General argues that it is unquestionable that the Department has the unambiguous statutory authority, in G.L. c. 164, §1 I, to impose penalties on Companies that provide poor service quality to ratepayers (Attorney General Reply Comments at 3, citing G.L. c. 164, § 1I). The Attorney General further argues that there is no language in G.L. c. 164, § 1I confining the Department's SQ penalty jurisdiction to only those Companies subject to PBR or who have otherwise consented to the Department's SQ regulation (Attorney General Reply Comments at 3-4). The Attorney General supports her reading of the statute by noting that when the General Court removed the penalty authority language from G.L. c. 164, § 1E and recodified it in § 1I in 2009, the General Court intended to grant the Department authority to levy such penalties without limitations of PBR or consent (Attorney General Reply Comments at 4). The Attorney General further argues that in interpreting a statute, it is an error of law to read into the statute a provision that the Legislature did not see fit to put there, whether the omission came from inadvertence or was intentional (Attorney General Reply Comments at 4, citing Gen. Elec. Co. v. Dep't of Environmental Protection, 429 Mass. 798, 803 (1999), quoting King v. Viscoloid Co., 219 Mass. 420, 425 (1914); Commonwealth v. Callahan, 440 Mass. 436, 443 (2003)). The Attorney General, therefore, concludes that the Department should reject the claims of Northeast Utilities and CMA as without merit (Attorney General Reply Comments at 4).

C. Analysis and Findings

There is no question that the Department has clear statutory authority to levy penalties on Companies that fail to meet the Department's service quality standards. Specifically, G.L. c. 164, § 1I provides:

> Each investor-owned electric distribution, transmission, and natural gas distribution company shall file a report with the department by March first of each year comparing its performance during the previous calendar year to the department's service quality standards and any applicable national standards as may be adopted by the department. *The department shall be authorized to levy a penalty against any distribution, transmission, or gas company which fails to meet the service quality standards in an amount up to and including the equivalent of 2.5 per cent of such company's transmission and distribution service revenues for the previous calendar year.*
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> G.L. c. 164, § 1I (emphasis added); St. 2009, c. 133, § 4.

This unambiguous statutory language, added by the General Court in 2009,[7] makes no reference to performance based ratemaking or utility consent.[8] Accordingly, we find that G.L. c.

[7] Prior to 2009, the Department's authority to establish service quality guidelines and levy penalties related thereto was contained in G.L. c. 164, § 1E, which references PBR. In 2009, the General Court removed the penalty language from G.L. c. 164, § 1E(c). St. 2009, c. 133, § 2. At the same time, the General Court added G.L. c. 164, § 1I, which makes no reference to PBR and deals exclusively with service quality standards and penalties for failure to meet those standards. St. 2009, c. 133, § 4.

164, § 1I unequivocally grants the Department authority to levy penalties against any distribution, transmission, or gas Company that fails to meet the service quality standards in an amount up to and including the equivalent of 2.5 per cent of such Company's transmission and distribution service revenues for the previous calendar year.

IV. OVERVIEW OF CHANGES TO PENALTY MECHANISM ELEMENTS

A. Introduction

In D.P.U. 12-120-B, the Department proposed a number of general changes to the way standards are set and penalties are calculated under the SQ Guidelines. First, the Department proposed to move to a paradigm of continuous improvement rather than a system designed to prevent degradation in service quality. For many metrics, therefore, the Department proposed a Glide Path or improvement path that would require improved performance over time. D.P.U. 12-120-B at 14-15. Second, for most metrics, the Department proposed moving from company-specific standards to statewide standards applicable to all Companies. D.P.U. 12-120-B at 13-14.[9] Third, the Department proposed discontinuing the availability of offsets. D.P.U. 12-120-B at 12-13.[10] Fourth, the Department proposed a new mechanism ("the three-year rolling average") whereby a Company can measure its performance by either (i) its

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8 CMA's and Northeast Utilities' arguments tying the DPU's service quality penalty authority to PBR and consent are based exclusively on outdated statutory language (pre-2009 language of G.L. c. 164, 1E(c)). Nowhere in their comments do they discuss or cite the clear penalty authority language quoted above.

9 Under the current SQ Guidelines, standards are generally fixed based on each Company's own historical performance levels. D.P.U. 12-120-B at 8.

10 Under the current SQ Guidelines, if a Company's performance as measured by one metric would merit a penalty, a Company can reduce or eliminate that penalty if the Company earns an offset through performing substantially better than the standard on another penalty metric. See D.T.E. 04-116-A at 47-48.

annual mean performance for the reporting year, or (ii) the average of its most recent three years of performance, to determine whether penalties apply.

B. Improved Service Quality

1. Summary of Comments

The Companies generally argue in favor of fixed benchmarks based on historical performance levels rather than benchmarks that require improvement over time (see, e.g., Northeast Utilities Initial Comments at 22; National Grid Initial Comments at 5; CMA Initial Comments at 6; Unitil Initial Comments, Brown Report at 4). The Companies argue that historical performance provides the most accurate reflection of the range of business conditions affecting the Companies' distribution systems, including but not limited to service territory characteristics, such as geography and demographics; distribution system characteristics; data collection processes; and the Companies' construction and repair standards (see, e.g., Northeast Utilities Initial Comments at 22; Unitil Initial Comments, Brown Report at 4-5; CMA Initial Comments at 18). The Companies also contend that their historical data reflects the level of performance paid for by customers in each service territory (Northeast Utilities Initial Comments at 22; CMA Initial Comments at 18).

The Companies assert that the Department's proposal fails to recognize that there are diminishing returns to investment in the pursuit of continuously improving service, i.e., that the "next increment" of service quality may be extremely difficult and costly to achieve (see, e.g., Northeast Utilities Initial Comments at 21; National Grid Initial Comments at 4-5; Liberty Utilities Initial Comments at 9-10; CMA Initial Comments at 17). The Companies also assert that focus on continuous improvement does not take into account whether customers desire improvement or are willing to pay for improvement (see, e.g., National Grid Initial Comments at 5; Unitil Initial Comments, Brown Report at 5-6). The Companies also contend that the Department has not based the new standards on a cost-benefit analysis and that the costs to achieve the new standards may exceed the value to customers (see, e.g., National Grid Initial Comments at 3, n. 2; Northeast Utilities Initial Comments at 9; CMA Initial Comments at 16-17; Unitil Initial Comments at 1; Liberty Utilities Initial Comments at 11). Further, the Companies argue that improvements in areas that do not increase customer satisfaction have the potential to drive limited resources away from innovations in new or improved services and toward penalty avoidance (see, e.g., National Grid Initial Comments at 5; Unitil Initial Comments, Brown Report at 5-6). CMA also contends that an escalating benchmark may penalize Companies, in the later years, for previous improvements in service quality (CMA Initial Comments at 18).

The Companies further state that requiring continuous improvement means performance standards will become a moving target, making it difficult to develop work plans, capital planning and budgets, as well as to hire, train and qualify workers needed to meet continuously changing goals (National Grid Initial Comments at 4; Liberty Utilities Initial Comments at 14-15; Berkshire Initial Comments at 6). The Companies add that because the proposed SQ Guidelines will require significant changes to the Companies' current operations, a minimum 'ramp-up' period of three years is needed to plan for, rather than react to, the proposed changes (NSTAR Initial Comments at 19-21, citing D.P.U. 04-116-B at 9, and D.P.U. 04-116-C, Appendix A, § I.C.; Liberty Utilities Initial Comments at 7-8, citing D.T.E. 99-84-A, Attachment 1, § I.C.). Without this 'ramp-up' period, the Companies caution that the continuous improvement approach is not only inefficient and impractical, but that safety will be compromised with insufficient preparation and training and may result in unintended outcomes that are contrary to the long-term interests of customers (NSTAR Initial Comments at 20-21; Liberty Utilities Initial Comments at 8; National Grid Initial Comments at 3, 12).

The Attorney General, however, supports continuously improving standards for the following reasons: (1) Companies can achieve better service quality through technology and other process innovations today; (2) there is a growing societal reliance on service quality in businesses and residences in the state; (3) service quality has improved in the last seven years, showing what is possible; (4) customer expectations of service quality have changed; (5) the effects of aging infrastructure need to be counteracted; and (6) cost-effective and least-cost grid modernization is driving expectations of improvement in service quality (Attorney General Initial Comments at 1-2). The Attorney General further maintains that the proposed standards reflect the average of the Companies' current performance, and therefore the Department should reject the Companies' request to delay implementation in order to meet the increased standards (Attorney General Reply Comments at 26-27). The Attorney General further argues that, in most instances, the standards will not be radically different from the Companies' current benchmarks and that the Companies should be able to meet the new standards (Attorney General Reply Comments at 26-27). For those metrics that are subject to the Glide Path Method, the Attorney General contends that the Glide Path Method already builds in additional time for the Companies to comply, as it continues to provide the Companies with the full deadband protection from penalties, which will be incrementally reduced only after three years, as well as the option to report a three-year rolling average that benefits well-performing Companies (Attorney General Reply Comments at 26-27).

The Attorney General states that ratepayers have already made significant investments in a number of reliability improvements for each Electric Company over the past five years (Attorney General Second Reply Comments at 3-4, citing Attorney General Initial Comments, at 3–5; Exh. RR-DPU-2 (Att.)). Countering the Companies' claims that the Glide Path target would necessitate additional investment, the Attorney General maintains that the ratepayers are already paying for, and receiving, the additional improvements necessary to meet the SAIDI and SAIFI targets at the end of the Department's proposed Glide Path and, therefore, the Electric Companies do not require additional investment as they need only maintain their existing levels of reliability (Attorney General Reply Comments at 15-16; Attorney General Second Reply Comments at 3).

Cape Light Compact also supports the Department's decision to move to SQ Guidelines based on continuous improvement rather than preventing degradation, maintaining that the new standards properly recognize changes in ratemaking and the public's growing reliance on service quality (Compact Reply Comments at 1).

2. Analysis and Findings

We agree with the Companies that SQ standards should be informed by historical performance so that the Companies can reasonably achieve them. Thus, the standards set in the current proceeding are significantly informed by historical performance levels in order to ensure that the standards are reasonably achievable.[11] We do not, however, agree that SQ standards designed solely to prevent performance from degrading continue to be appropriate.

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11 Further, with respect to the Companies' arguments that historical data reflect the level of service paid for by customers, it is clear that Companies that have lower rates are not entitled to provide substandard service.

As described in D.P.U. 12-120-B, the Department first established SQ standards and guidelines in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 99-84 (2001), which were later amended in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 04-116-C (2007). Pursuant to G.L. c. 164, § 1E, the initial SQ standards were largely intended to ensure that the quality of service experienced by customers did not deteriorate with the implementation of PBR. At that time, PBR was a new model of ratemaking, and was intended to incentivize Companies to achieve operational efficiencies and minimize costs.[12] In order to prevent degradation in service quality, the Department based the benchmarks Companies would be required to meet on company-specific, historical performance.[13] Today, we shift the goal of the SQ program from preventing the deterioration of performance to

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12 The Department established SQ requirements that were to be included in PBR plans for Gas and Electric Companies pursuant to G.L. c. 164, § 1E. The Department stated that the purpose of an SQ component of a PBR plan is to ensure that a Company does not act on its incentive to cut costs to the detriment of service quality. D.T.E. 04-116-A, at 46, citing D.T.E. 99-84, at 45 (August 17, 2000). For those Companies without a PBR plan, the Department explained that the SQ Guidelines metrics, benchmarks, and penalties also apply to those Companies operating under merger-related or acquisition-related rate plans. See, e.g., Fitchburg Gas and Electric Light Company, D.P.U. 07-71, at 202-203 (2008); Western Massachusetts Electric Company, D.T.E. 06-55, at 25 (2006); NSTAR Electric Company Service Quality, D.T.E. 01-71-A at 8-9, 12-18 (2002); Massachusetts Electric Company Service Quality, D.T.E. 01-71-B at 16-26 (2002); D.T.E. 99-84, Letter Order at 6 (May 28, 2002); D.T.E 99-84, Letter Order at 3-6 (April 17, 2002).

13 Under the current SQ Guidelines adopted in D.T.E. 04-116, there are limited exceptions to this approach for reasons specific to certain metrics (e.g., metrics for gas Odor Call Response time and circuit level electric reliability). See D.T.E. 04-116-C, Appendix A at 5.

requiring improved service quality.[14] While we endeavor to create a system in which Companies are incented to continuously improve over time, we have made various changes to our proposal such that the move to "improved service quality" is a more accurate reflection of this paradigm shift. These changes will be described fully in the sections that follow.

As we describe in more detail in D.P.U. 12-120-B, the paradigm shift to improved service quality is warranted at this time for several reasons. First, as described above, SQ is no longer statutorily tied to PBR, and PBR plans are no longer the dominant form of ratemaking in the Commonwealth.[15] Second, it is clear that the Electric and Gas Companies are able to achieve higher levels of service quality than in 2002 when the SQ Guidelines were first implemented. This is illustrated by overall improvement statewide for many metrics since these data were first reported.[16] Given such improvement in performance, if our standards do not require improved levels of service they risk becoming outdated and meaningless.

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14 In 2009, the Legislature established the Department's statutory authority regarding SQ standards independent of any connection to PBR, thereby severing the link between PBR and SQ. G.L. c. 164, §1I.

15 The Department has moved away from PBR ratemaking. See Investigation by the Department of Public Utilities on its own Motion into Rate Structures that will Promote Efficient Deployment of Demand Resources, D.P.U. 07-50-A at 1,5 (2008), citing St. 2008, c. 169 (implementing decoupling and stating that Companies would have to show that a PBR plan is still warranted under a decoupled rate structure); Fitchburg Gas and Electric Light Company, D.P.U. 13-90, at 40-41 (2014), citing St. 2012, c. 209, Section 51 (stating that some PBR rate plans may no longer be appropriate due to filing deadlines prescribed by the 2012 Energy Act).

16 For example, performance for system-level electrical outages – System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI") – have improved significantly. The statewide average SAIDI for 1996-2005 was roughly 121.3 minutes of outage per customer per year, while from 2009-2013 it was 96.2 minutes of outage per customer per year. The statewide average

Third, the Department finds that customers expect improved levels of service quality. Today, business and residential customers are increasingly reliant on electricity to power their computers and other devices. See Investigation by the Department of Public Utilities on its own Motion into Modernization of the Electric Grid, D.P.U. 12-76-B at 1-2 (2014). In addition, more and more customers are utilizing gas to heat their homes and need reliable service. See Boston Gas Company, D.P.U. 13-157, at 24 (2014). Fourth, the advances in available technologies and processes make it technically feasible to improve service quality at a more reasonable cost than earlier.[17] While the adoption of such advances in technology is a core element of Gas and Electric Company planning and operations, advanced technology has gained significant emphasis in recent years, including in the Department's proceeding on grid modernization.[18] The Department expects that Electric Companies' grid modernization efforts will help them meet new reliability metrics or standards that result from this proceeding. D.P.U. 12-76-A at 13-14.[19]

SAIFI for 1996-2005 was roughly 1.22 outages per customer per year; from 2009-2013 it was roughly 0.88 outages per customer per year.

17 As examples, improvements in SQ performance for electric reliability and customer service are at least partly due to advances in technology relating to the distribution system, meter reading, billing, and telephone answering that were not widely available prior to 2001.

18 On June 12, 2014, the Department issued an Order requiring Electric Companies to file grid modernization plans. Investigation by the Department of Public Utilities on its Own Motion into Modernization of the Electricity Grid, D.P.U. 12-76-B (2014).

19 For example, investments in technology deployed on the grid, such as distribution automation, enable the automated prevention of and response to outages, thus significantly reducing the frequency and duration of interruptions in service to customers. Similarly, advanced metering functionality, one of the Department's grid modernization priorities, can make loss and restoration of power to individual customers transparent to Companies, thus enabling reduced outage time, better service for customers, greater efficiency, and reduced costs for Companies. D.P.U. 12-76-A at 12-13.

Accordingly, the SQ Guidelines are a vital complement to our policies to advance grid modernization.

The Companies make several arguments against the proposed shift from a no-degradation standard to a continuous improvement standard relating to (1) whether there are diminishing returns for increased investments in service quality; (2) whether the benefits of higher levels of service quality exceed the costs; (3) whether customers want continuing improvement and are willing to pay for it; (4) whether the new standards will make it more difficult for Companies to plan; and (5) whether Companies will be penalized in later years for improved service quality in the past.

With respect to the Companies' contention that increased investment in service quality will lead to diminishing returns, we note that the revised SQ Guidelines do not become increasingly stringent in perpetuity. Rather, for all metrics, our revised SQ standards entail specific, enumerated, and limited increases. The term "continuous improvement" refers specifically to the Glide Path Method, wherein the Department has selected an appropriate penalty threshold for ten years hence for certain metrics, and has established a gradual tightening of the penalty threshold over time to reach that target. The Glide Path Method applies to SAIDI/SAIFI and Service Appointments. Some metrics contain a fixed benchmark that will require improvement from the D.T.E. 04-116 benchmarks, but will not increase until the Department next reviews the SQ Guidelines (i.e., gas Odor Call Response, Customer Satisfaction Surveys, Customer Complaints, Customer Credit Cases, and Downed-Wire Response). For these metrics, the Department has established fixed statewide or company-specific standards. For such metrics "improvement" is achieved by higher fixed standards, refinements in what the metrics measure, or the association of penalties with a currently non-penalty-eligible metric. In addition, as discussed below, the elimination of offsets will require improved performance across all metrics.

The Companies question if the Department has adequately considered whether the benefits to customers of the new SQ Guidelines exceed the potential costs. As an initial matter, unlike other Department programs, (e.g., energy efficiency, long term contracts), there is no statutory or regulatory requirement that mandates that the Department conduct an explicit cost-benefit analysis before establishing SQ Guidelines . Indeed, the Department has previously adopted SQ standards without doing so. See D.T.E. 99-84 (June 29, 2001); D.T.E. 04-116-C. While we determine that an explicit cost-benefit analysis is not appropriate or required here, before adopting these new SQ Guidelines the Department allowed numerous opportunities for stakeholders to express their views on the costs and benefits of our proposal. We have considered these comments and our own extensive experience with service quality and have determined that the proposed SQ Guidelines are in the public interest.

Contrary to the Companies' assertion, we know from our daily experience with customers that they place a high value on safety and reliability. See, e.g., NSTAR Electric Company, D.P.U. 11-85-B/11-119-B at 8-11 (2012); Western Massachusetts Electric Company, D.P.U. 11-119-C at 95 (2012). In addition, we know that they want and expect service quality improvements to keep up with their increasing reliance on energy.[20] Thus, while meeting certain

[20] Similarly, in response to the Companies' arguments that improvements in areas that do not increase customer satisfaction have the potential to drive limited resources away from innovations and toward penalty avoidance, we have carefully considered the metrics included in our revised SQ Guidelines and find that they are important measures of customer satisfaction.

standards may require new investment, we have concluded that such investments are merited to ensure public safety and improved customer satisfaction.[21] Other metrics will not require the Companies to incur significant costs to achieve the new standards because the Companies' performance is already near, at, or even above the new benchmarks (e.g., SAIDI/SAIFI, Customer Credit Cases, Odor Call Response).[22]

Further, as noted by the Attorney General, the Glide Path Method simply adopts the Statewide Mean of the Companies' historical performance as the target for the penalty threshold in ten years. The performance in recent years of certain Companies is significantly better than this historical average. Even though many Companies are performing at or near the Statewide Mean for SAIDI and SAIFI, the revised SQ Guidelines constitute significant improvement for several reasons. First, the actual benchmarks for each Company will improve significantly over current benchmark levels, thus requiring Companies that have performed well in recent years to continue to perform well. Second, in their planning to meet SQ standards and manage risk, we do not expect that Companies will seek to perform exactly at the level of the penalty threshold, but rather, that they will aim for performance that is better than the penalty threshold. Third, the elimination of offsets removes some protection from penalties for all metrics and requires the Companies to meet the SQ standards for all metrics. For these reasons, we find that the standards we adopt regarding SAIDI and SAIFI will result in significant improvement.

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21 For example, Fitchburg may require additional investment to improve its SAIFI performance and some Companies may require some additional investment for Service Appointments purposes.

22 For example, NSTAR is already performing above the Statewide Mean for SAIDI and SAIFI and many of the gas Companies are already meeting a 97 percent Odor Call Response benchmark.

In several instances, we have revised our proposed metrics, partly to accommodate the Companies' arguments about resources and cost; this includes revisions to most penalty metrics (i.e., SAIDI, SAIFI, CKAIDI, CKAIFI, Service Appointments, gas Odor Call Response, Downed-Wire Response).[23] Also, we have revised our proposal to allow more time for Companies to plan and invest, which should reduce the economic and planning burdens of achieving improvements very quickly. Specifically, we have (1) revised the Glide Path Method so that Companies have three years to plan for improvements to SAIDI and SAIFI; and (2) for some customer service metrics, we allow time for data collection prior to implementation of new penalty thresholds. To further aid the Companies' planning, the Department has set forth the metrics that are penalty eligible and has clearly enumerated the penalty thresholds.

Finally, we do not agree that our revised SQ Guidelines will penalize Companies in later years for improvement achieved previously. Companies are obligated to provide customers with a high level of service quality and to achieve improvements in service. We are not persuaded that it is inappropriate to raise the standard of service quality going forward because a Company has been able to achieve certain improvements in the past.

For all these reasons, the Department finds that it is appropriate and necessary to update our SQ standards with the overall requirement of improved service quality.

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[23] We also make a currently penalty-eligible metric, Lost Work Time Accident rate, a reporting-only metric, though the rationale for this change is not related to issues of cost or resources (see Section VII, below).

C. Statewide Standards

1. Summary of Comments

The Companies oppose statewide standards and argue in favor of company-specific standards (see, e.g., National Grid Initial Comments at 5-6; Berkshire Initial Comments at 4; Northeast Utilities Initial Comments at 23-24; Companies Joint Reply Comments at 7). The Companies assert that statewide standards do not take into consideration the differences among Companies' systems and service territories (see, e.g., National Grid Initial Comments at 5-6; Northeast Utilities Initial Comments 23-24; Unitil Initial Comments at 2 & Brown Report at 1-2; CMA Initial Comments at 5-7; Berkshire Reply Comments at 2). For example, National Grid contends that notwithstanding future enhancements to the Companies' systems as a result of investments in grid modernization technologies, the electric reliability experienced by customers in urban areas still can be expected to be better overall than that experienced by customers in rural areas due to differences in the physical configuration of the electrical systems and in weather, geography and tree cover (National Grid Initial Comments at 6). The Companies also aver that the Department has previously recognized that "all customers will not receive the same service for legitimate reasons" because there are differences in geography, weather patterns, customer demographics, the mix of rural versus urban customers, and the type of infrastructure relied on to service customers (National Grid Initial Comments at 6, citing D.T.E. 99-84, at 7-8 (August 17, 2000); Unitil Initial Comments at 2 & Brown Report at 4). The Companies also claim that statewide standards are inappropriate because not all Companies utilize the same data management and information technology systems in tracking SQ information (see, e.g., Northeast Utilities Initial Comments at 23; Companies Joint Reply Comments at 7). Smaller

Companies argue that statewide averages are inappropriate because of the disproportionate effect on smaller utilities that do not have a diversity of service territory and system design, and have smaller numbers of service quality events, as compared to larger Companies (see, e.g., Unitil Initial Comments at 2 & Brown Report at 1-4; Berkshire Initial Comments at 4; Berkshire Reply Comments at 1-2; Companies Joint Reply Comments at 7). To address the differences between smaller and less-urban utilities and larger and more urban utilities, Unitil recommends that the Department normalize the standard for each Company based on customer size and construction mix, or classify circuits based on the percentage of the circuit that is underground, and then calculate the statewide mean standard for each group of feeders weighting each feeder by the number of customers it serves (Unitil Initial Comments, Brown Report at 21-23).

The Companies also contend that statewide standards could result in performance degradation for some Companies and impossible thresholds for other Companies (see, e.g., Northeast Utilities Initial Comments at 22; Companies Joint Reply Comments at 7). The Companies further assert that any proposal to shift away from company-specific historical benchmarks to statewide standards requires a comprehensive analysis to fully understand the impact of the new standards (see, e.g., National Grid Initial Comment at 8; Northeast Utilities Initial Comments 22-23; NEGC Initial Comments at 11).

The Attorney General agrees with the Department's proposal to hold all of the Companies to statewide standards so that all customers in the Commonwealth can be assured of equally high levels of service quality (Attorney General Reply Comments at 4-5, citing D.P.U. 12-120-B at 14). The Attorney General challenges the Companies' claims that company-specific standards are necessary due to demographic and geographic differences

(Attorney General Reply Comments at 4-5, citing D.P.U. 12-120-B at 1). Specifically, the Attorney General contends that the Companies have not provided any compelling evidence showing that common standards cannot be reasonably applied (Attorney General Reply Comments at 4-5, citing D.P.U. 12-120-B at 1). In addition, the Attorney General argues that the Companies failed to cite to historical data that reflect large disparities in service quality performance due to differences in Company service territories (Attorney General Reply Comments at 4-5, citing D.P.U. 12-120-B at 1).

Further, with respect to electric reliability, the Attorney General argues that Electric Companies have demonstrated changing performance levels relative to one another in SAIDI and SAIFI, and that this would not be the case if territorial differences prevented the Companies from reasonably achieving comparable levels of electric reliability (Attorney General Reply Comments at 7). For example, the Attorney General argues that NSTAR and Unitil were previously the two weakest Companies in electric reliability, but have been the two strongest in recent years (Attorney General Reply Comments at 6-7 (internal citations omitted)). Moreover, the Attorney General argues that Unitil's claims that its SAIFI levels are high due to its rural geography are not plausible given that WMECo and National Grid also serve rural areas, but maintain much stronger SAIFI performance (Attorney General Reply Comments at 7-8, citing Unitil Initial Comments at 2). The Attorney General concludes that it is both fair and appropriate, given the changes to the underlying purposes of the Department's SQ Guidelines, to require benchmarks for the Companies based on common standards (Attorney General Reply Comments at 8).

2. Analysis and Findings

The Department remains convinced that customers in the Commonwealth should be able to expect a similar, minimum standard of service regardless of which Company offers utility services in their area, and regardless of differences in Companies' rates. However, based largely on the Companies' arguments regarding their operations and capabilities, the Department finds that moving immediately to a statewide standard for all metrics is not optimal. Therefore, the Department establishes standards that improve over time, as well as new or higher fixed standards, but provides Companies with additional time to invest in their systems and achieve required improvements.[24]

In this regard, we change the Glide Path Method, which is applicable to several metrics, from our proposal in D.P.U. 12-120-B. In particular, rather than moving immediately to a statewide standard, for the first three years of the new SQ Guidelines each Company will continue to measure its performance against its current, company-specific, ten-year fixed historical benchmarks. Following the first three-year period, the penalty thresholds will shift from those company-specific, ten-year historical levels via company-specific Glide Paths to reach common statewide standards at year ten (i.e., ten years after the new SQ Guidelines go into effect). At that time, the penalty threshold will be the Statewide Mean and the penalty maximum will be one standard deviation above the penalty threshold. The company-specific Glide Paths for both the penalty threshold and penalty maximum will shift to the year-ten statewide standards

[24] Benchmarks for SAIDI and SAIFI will improve over time through the Glide Path Method. Metrics with fixed statewide benchmarks include Odor Call Response, Customer Satisfaction Surveys, Customer Complaints, and Downed-Wire Response. Customer Credit Cases is subject to a fixed company-specific benchmark.

in three equal steps, occurring once every three years, in gradations of one third of the difference between current benchmarks and the year-ten statewide standards.[25] Additionally, the Department adopts a three-year rolling average reporting option, which allows a Company to apply either its performance data for the current reporting year, or its performance data for the average of the current year and the prior two years, to determine whether a penalty applies in the reporting year.[26]

The Companies make related arguments against the shift to statewide standards, asserting that differences in their service territories, Company size, and Company systems prevent application of a statewide standard. Our analysis of existing data belies the Companies' arguments. Regarding differences in reliability due to variations in tree cover, weather, geography, service territory size, and demographic make-up (i.e., rural vs. urban), the Department finds persuasive the analysis provided by the Attorney General that demonstrates that Company historical performance does not correlate with such differences. Rather, analysis of historical information, as reported in the Companies' annual SQ reports, shows that individual Companies have seen their own performance improve or worsen over time, largely unrelated to demographics (see, e.g., Fitchburg Gas and Electric Light Company 2012 Service Quality Report, D.P.U. 13-SQ-10 (Filing); Massachusetts Electric Company 2012 Service Quality Report, D.P.U. 13-SQ-11 (Filing); Nantucket Electric Company 2012 Service Quality Report;

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25 We maintain our proposal that the statewide penalty threshold will be equal to the Statewide Mean of all Companies in year ten. We discuss the calculation of the Statewide Mean standard in the individual metric sections below.

26 Companies are required to report the relevant year's performance data even if they choose to use the three-year rolling average reporting option for penalty purposes.

D.P.U. 13-SQ-12 (Filing); NSTAR Electric Company 2012 SQ Report, D.P.U. 13-SQ-13 (Filing); Western Massachusetts Electric Company 2012 SQ Report, D.P.U. 13-SQ-14 (Filing); Berkshire Gas Company 2013 Service Quality Report, D.P.U. 14-SQ-02 (2014) (Filing); Blackstone Gas Company 2013 Service Quality Report, D.P.U. 14-SQ-03 (Filing). Further, we note that the only electric reliability metrics proposed to become statewide, SAIDI and SAIFI, will use the Glide Path Method, with the standard to be achieved ten years from now the historical 18-year average. Also, in recent years all the Electric Companies have generally performed far better than this standard, as argued by the Attorney General.[27] In addition, we note that our proposed standard based on average performance is not a standard so stringent as to require all Companies to achieve the performance level of the top performer. Consistent with this analysis, we decline to adopt Unitil's proposal to normalize the Companies' electric system reliability data to account for differences, for example, in the percentages of circuits above ground and underground.

Regarding the argument that certain metrics, as proposed, could result in unfair impacts on smaller Companies simply because of the small number of events they are likely to experience (e.g., for metrics such as Downed-Wire Response), we are persuaded to adjust some of our metrics. For example, for this reason we adopt the Companies' recommendation to base the Downed-Wire Response metric on average response time. See Section V, below. However,

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27 We note that Unitil has experienced relatively high SAIFI performance levels in recent years. However, Unitil has increased its vegetation management budget and practices in recent years and also was approved for a Resiliency Program, which should further enable reductions in SAIFI. Fitchburg Gas and Electric Light Company, D.P.U. 13-90, at 21, 113-115 (2014). The Department expects that the Glide Path Method, including the maintenance of the current standard for three years, should allow Unitil to achieve this level of performance required by the new standards.

for other metrics, such as gas Odor Call Response, we hold all Companies to the same standard.[28]

Further, we are not convinced that differences in Company computer systems merit weakening our proposed service quality standards. Companies are obligated to provide high levels of service quality and must deploy systems capable of achieving such high levels. It is important to note also that while we now hold Companies to statewide standards, we do not prescribe how Companies should meet those standards. Company management is responsible for determining where to invest in systems and resources to achieve the required performance.

Regarding the argument that moving to a statewide standard will result in a degradation of service for some Companies and an impossible threshold for other Companies, we disagree. As described throughout this Order, we have revised our proposed SQ Guidelines to ensure that the standards are reasonable for Companies to achieve. Accordingly, we reject the notion that they will be impossible to achieve for any Company. Similarly, we are generally not persuaded that the statewide standards will result in a degradation of service for some Companies, since the new proposed penalty thresholds are an increase in stringency relative to each Company's current benchmarks in virtually all cases; we address the one exception, the system electric reliability standards for Nantucket Electric, below. In addition, our deletion of offsets will also increase stringency overall.

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28 The new SQ Guidelines retain the ability for Companies to request a waiver in a reporting year.

D. Offsets and Deadbands

1. Summary of Comments

The Companies urge the Department to continue the availability of offsets and deadbands[29] (see, e.g., National Grid Initial Comments at 9-11; Northeast Utilities Initial Comments at 17; CMA Initial Comments at 8; Berkshire Initial Comments at 4-5). The Companies argue that (1) offsets and deadbands are necessary because Company performance is affected by factors outside of Company control; (2) offsets and deadbands are statistically required; (3) offsets provide the Companies appropriate performance incentives; and (4) offsets and deadbands are required because of the requirements of reasoned consistency.

First, the Companies contend that offsets and deadbands are necessary to help correct for variations in performance that are caused by factors outside of the Companies' control (see, e.g., National Grid Initial Comments at 19-20; Northeast Utilities Initial Comments at 13; CMA Initial Comments at 9; Unitil Initial Comments, Brown Report at 35). The Companies also assert that a critical underpinning of the Department's SQ program has been that penalties will be assessed only where (1) there is a level of certainty that service has actually fallen below the established standard; and (2) the performance shortfall is under the control of management (see, e.g., Northeast Utilities Initial Comments at 12; CMA Initial Comments at 9, citing D.T.E. 99-84, at 49 (August 17, 2000), D.T.E. 99-84, at 29, n.27 (June 29, 2001); Companies Joint Reply Comments at 5). The Companies contend, therefore, that inclusion of offsets and

[29] Under the current SQ Guidelines, where a Company's performance varies from the fixed company-specific historical mean by less than one standard deviation, the Company will neither incur a penalty nor earn an offset. The area between the mean and one standard deviation from the mean is referred to as the deadband or penalty-free zone.

deadbands in the penalty structure is intended to ensure that Companies are not penalized for events or circumstances that have a negative impact on service quality performance, but are not caused by the Company and are not under the Company's control (see, e.g., Northeast Utilities Initial Comments at 13, citing D.T.E. 99-84, at 27 (June 29, 2001); Liberty Utilities Initial Comments at 5-6; Companies Joint Reply Comments at 5).

The Companies challenge the Department's conclusion in D.P.U. 12-120-B that because the proposed SQ Guidelines no longer base service quality standards on historical performance, offsets are no longer necessary (see, e.g., CMA Initial Comments at 8, citing D.P.U. 12-120-B at 13; National Grid Initial Comments at 9-10). CMA argues that the Department's justification misses the point because randomly occurring external drivers of utility performance will factor into a utility's measurement of performance whether the benchmark is set based on historical data or statewide data (CMA Initial Comments at 8; see also National Grid Initial Comments at 9-10; Berkshire Initial Comments at 4-5). Therefore, CMA contends that it is not the benchmark that requires the offset, but the inherent nature of the performance data used to gauge utility performance (CMA Initial Comments at 8; see also National Grid Initial Comments at 9-10). The Companies also contend that the three-year rolling average reporting option proposed by the Department does not compensate for the lack of deadbands because extended weather patterns, such as those experienced from 2011-2013, can drive performance on measures like SAIDI and SAIFI, rendering the three-year rolling average reporting option ineffective (Companies Joint Second Reply Comments at 38).

Second, the Companies claim that offsets and deadbands are required to mitigate statistical errors, resulting ina Company's being punished when performance is not actually substandard (see, e.g., National Grid Initial Comments at 6-10; Northeast Utilities Initial Comments at 13, citing D.T.E. 99-84, at 3, 22 (June 29, 2001); D.T.E. 99-84, at 47 (August 17, 2000); CMA Initial Comments at 8, 10-11; Berkshire Initial Comments at 4-5). For example, Northeast Utilities and CMA argue that, in D.T.E. 99-84, the Department previously computed a standard deviation using historical performance data to create the deadband, but acknowledged that the concept of standard deviation is not applicable when there are relatively few available data points (Northeast Utilities Initial Comments at 13, citing D.T.E. 99-84, at 3, 22 (June 29, 2001); D.T.E. 99-84, at 47 (August 17, 2000); CMA Initial Comments at 10). Northeast Utilities and CMA maintain that under generally accepted mathematical principles, at least 30 data points are needed for the valid calculation of a standard deviation in this context (Northeast Utilities Initial Comments at 13, citing D.T.E. 99-84, at 22 (June 29, 2001);[30] *Statistical Concepts and Methods, by Bhattacharyya, G. and R. Johnson* (1977), New York: John Wiley and Sons; CMA Initial Comments at 10). Northeast Utilities and CMA further assert that in adopting the standard deviation approach, the Department recognized that the use of "company-specific historical data" would "necessarily result in sample sizes of ten [years] or less," and noted the "statistical probability that the standard deviation approach will result in a 16 to 18 percent chance of Type 1 errors," in light of the limited available data (Northeast Utilities Initial Comments at 14, quoting D.T.E. 99-84, at 27-28 (June 29, 2001); CMA Initial Comments at 11). Quoting the Department, Northeast Utilities and CMA state that the Department found offsets to be necessary:

[30] The Department notes that Northeast Utilities cites to arguments made by the Companies in that proceeding, and not to the Department's analysis or findings.

> In order to provide an additional safeguard against the probability of a company being subject to a SQ penalty for random variations in performance, the Department shall incorporate an "offset" feature [into] the penalty mechanism. . . . The Department considers a standard deviation approach that includes a system of monetary offset credits best achieves our goal of balancing the risk of Type 1 errors with the risk of Type 2 errors.

(Northeast Utilities Initial Comments at 14, quoting D.T.E. 99-84, at 28 (June 29, 2001); CMA Initial Comments at 11). The Companies, therefore, contend that the offset component was designed to work in tandem with the standard deviation deadband to provide Companies with an opportunity to use the upside potential to offset the downside potential of erroneous penalties, which have the potential to occur even with application of the standard-deviation deadband (Northeast Utilities Initial Comments at 14-15, citing D.T.E. 99-84, at 28 (June 29, 2001); see also Unitil Initial Comments, Brown Report at 12).

Third, the Companies argue that offsets encourage Companies to identify the most cost-effective ways to improve service quality and even perform above the benchmark (see, e.g., Unitil Initial Comments, Brown Report at 35; Berkshire Initial Comments at 4-5; Companies Joint Reply Comments at 4; Companies Joint Second Reply Comments at 2, n. 2). The Companies further contend that offsets promote investment by providing a strong incentive to invest time, money and effort in pursuing improvements that are cost-effective and feasible (Companies Joint Reply Comments at 2; Companies Second Joint Reply Comments at 2, n. 2) Conversely, the Companies assert that an SQ system that focuses on direct and substantial monetary penalties (i.e., does not have offsets) will severely narrow management focus to the avoidance of penalties, which may be far less effective in promoting "continuous" improvement (Companies Second Joint Reply Comments at 2, n. 2). In response to the Attorney General's comments, the Companies claim that there is no clear and substantial evidence that the use of offsets "masks" deficient performance (Companies Joint Reply Comments at 4).

Finally, the Companies claim that the Department has offered no analytical justification for its deviation from prior regulatory practice (Companies Joint Reply Comments at 5, citing Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd., 448 Mass. 45, 46 (2006) (stating that "[a] party to a proceeding before a regulatory agency such as the [board] has a right to expect and obtain reasoned consistency in the agency's decisions")). Northeast Utilities claims that the Department has not adequately explained its reasons for departing from prior practice, and notes that the Department is bound by the doctrine of reasoned consistency to adhere to its developed ratemaking and regulatory principles unless the Department has formulated a sound basis for deviating from those principles (Northeast Utilities Initial Comments at 7).

The Attorney General and the United Steelworkers support the Department's proposal to discontinue offsets (Attorney General Initial Comments at 2; United Steelworkers Initial Comments at 2). The Attorney General states that she agrees with the Department's finding that offsets were a product of ensuring non-degradation of service under PBR, and also that elimination of offsets is consistent with the goal to require improved levels of service quality (Attorney General Initial Comments at 2, citing D.P.U. 12-120-B at 13). As a way to mitigate the Companies' concerns, the Attorney General supports the Department's alternative reporting proposal to allow Companies to report their three-year rolling average performance if the current reporting year results are below the standard, thereby reducing or eliminating penalties that may otherwise accrue (Attorney General Reply Comments at 8-10). The Attorney General contends that the key feature of the proposed three-year rolling average reporting option is that it is specifically designed so that the penalties that are mitigated or eliminated are the ones most likely attributable to random chance or other circumstances beyond the control of otherwise well performing Companies (Attorney General Reply Comments at 9-10).

Further, the Attorney General contends that offsets have more typically been used to mask less than desirable performance on some SQ metrics than to protect the Companies from the effects of statistical errors (Attorney General Initial Comments at 2). The Attorney General therefore asserts that the three-year rolling average option is better designed to address the particular statistical error inherent in SQ regulation (Attorney General Reply Comments at 10). In addition, the Attorney General avers that the Department has rightly determined that some of the former protections against penalties were unnecessarily cumbersome or were used in ways that did not further the goal of ensuring high service quality for Massachusetts ratepayers (Attorney General Reply Comments at 14).

The Attorney General also challenges the Companies' assertion that SQ standards without deadbands and offsets lacks a methodological basis, arguing that the law does not require statistical constructs in order to be valid and properly administered (Attorney General Reply Comments at 13-14). Lastly, in response to Northeast Utilities' argument that the Department has not explained its departure from previous regulatory practice, the Attorney General argues that reasoned consistency requires only "that any change from an established pattern of conduct must be explained" (Attorney General Reply Comments at 12, citing Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd., 448 Mass. 45, at 56 (2006)). The Attorney General asserts that the Department's detailed explanation of the change in the underlying purpose of its SQ regulation is a more than adequate explanation for the Department's proposal to remove certain features of its former SQ regulation (Attorney General Reply Comments at 12-13, citing D.P.U. 12-120-B).

2. Analysis and Findings

In D.P.U. 12-120-B, the Department proposed several distinct changes that relate to the use of offsets and deadbands, including discontinuing the availability of offsets, introducing a three-year rolling average reporting option, and adopting the Glide Path Method to establish benchmarks for certain metrics. Although offsets and deadbands are distinct elements of the current SQ framework, commenters often address these two elements together. Accordingly, in this discussion, we address the arguments regarding both offsets and deadbands.

The Companies assert that the Department should maintain its current practice of using offsets and deadbands in the SQ program because these features are needed to help correct for variations in performance due to factors that are beyond the Companies' control. As an initial matter, we considered the impacts of factors that are outside of a Company's control when setting the revised penalty thresholds, which are less stringent that they would be if all factors were within a Company's control. Impacts of weather (i.e., except for Excludable Major Events) are by design included in electric reliability metrics (e.g., SAIDI, SAIFI, CKAIDI, CKAIFI) and safety metrics (e.g., Downed-Wire Response, Odor Call Response). Further, safety, and consumer metrics are based on historical data, which includes the impacts of past weather and other factors beyond a Company's control.

Also, for the SQ metrics overall and for many of the metrics individually, there are additional safeguards to protect a Company from being penalized for events beyond its control.[31] First, the Companies are able to exclude from SQ performance calculation data from certain large events, i.e., those qualifying as Excludable Major Events. See SQ Guidelines at 3-4. Second, in this revision to our SQ standards, we adopt the three-year rolling average reporting option for Glide Path Method metrics to determine whether a penalty applies. With this option, if a Company experiences poor performance year due to factors beyond its control, but it otherwise has a multi-year record of strong performance, the Company's penalty could be mitigated or eliminated for that year. We agree with the Attorney General that the three-year rolling average reporting option is designed so that penalties that are mitigated or eliminated are the ones most likely due to random chance or other circumstances beyond the control of otherwise well performing Companies. Also, we note that this mechanism may be viewed as a "temporal" offset, where superior performance in one year can reduce or eliminate a penalty in a subsequent year through averaging. In addition, the Department agrees with the Attorney General that this approach is preferable in order to address the Companies' concerns about events outside of their control, as compared to the current use of offsets, which can mask deficient performance. Finally, while the Companies contend that that the three-year rolling average option will not be sufficient to address certain longer term weather patterns, we do not view this hypothetical as raising sufficient grounds to further mitigate our proposed revisions to

[31] For example, the Downed-Wire Response metric penalty threshold, which is an average based on certain percentages of events, thereby allowing Companies to eliminate from penalty calculations the most problematic data, exemplifies this.

the SQ Guidelines, especially given that we have considered the impacts of weather in setting the revised standards.

As will be described more fully below, there are also safeguards within specific metrics. With respect to Downed-Wire Response, we adopt the Companies' proposals to measure average response times and to exclude events for which a Company has timely dispatched personnel to respond to a call but emergency response is delayed due to circumstances beyond the Company's control (such as blocked or unplowed streets). With respect to Customer Credit Cases, we adopt company-specific benchmarks rather than the proposed statewide benchmarks because we recognize that the number of Customer Credit Cases a Company incurs is influenced by the percentage of low-income customers in the service territory. With respect to Service Appointments, we allow Companies to submit a request to the Department for permission to exclude data for Service Appointments rescheduled due to emergencies.

The Companies also argue that the Department must retain offsets and deadbands for the SQ framework to prevent statistical errors. The Department rejects this argument for several reasons. First, as outlined above, we find that the protections we have maintained and added, including the three-year rolling average reporting option, provide more than adequate cushion for Companies concerned about unwarranted penalties for statistical reasons. Second, regarding arguments that there are insufficient data points to establish a standard using a standard deviation approach, the Department notes that the Department has (or will have before a penalty goes into effect) more than the 30 data points, which several Companies suggest is required for statistical validity. Moreover, the Department notes that after the first three years of the implementation of the new SQ Guidelines, the Department will no longer use the standard deviation approach to setting the penalty threshold for Glide Path Metrics.[32] Rather, based on our review of historical data, the Department determined an appropriate penalty threshold that will apply in ten years (i.e., the Statewide Mean), and designed a Glide Path to move to the new penalty benchmarks in steps. Additionally, as will be described more fully below, we also have revised the proposed metrics for Customer Complaints and Customer Credit Cases to contain a deadband or penalty-free zone, which we will be using for these new metrics for the first time.

With respect to the Attorney General's argument that the law does not require statistical constructs to be valid and properly administered, we note that G.L. c. 164, § 1I does not prescribe any specific method for when or how SQ penalties should be applied. The General Court proscribed a maximum penalty, but provided discretion to the Department to determine how and when to impose penalties. Further, the Supreme Judicial Court has held that it will interfere with an agency's discretion in imposing penalties only in the most extraordinary of circumstances. See, e.g., Massachusetts Elec. Co. v. Dep't. of Pub. Utils., 469 Mass. 553, 576 (2014), citing Vaspourakan, Ltd. v. A.B.C.C., 401 Mass. 347, 355 (1987).

We reiterate our finding from D.P.U. 12-120-B that with the shift from a standard of preventing deterioration of historical levels of service to improved levels of service quality, two other changes to the service quality regime are appropriate. D.P.U. 12-120-B at 12-13. First, for most metrics, we have eliminated the deadband or penalty-free zone. In the D.T.E. 99-84/D.T.E. 04-116 service quality regime, the penalty threshold was set based on a fixed, Company-specific ten-year mean (i.e., the average of the individual Company's performance from 1996-2005) and

32 The Department does use a standard deviation calculation to determine the band between the penalty threshold and the penalty maximum benchmarks. See SQ Guidelines at 7-8.

included a penalty-free zone above that company-specific mean (of one standard deviation). Thus, each Company could perform above its historical mean and still avoid penalties. This made sense when the expected level of performance was set based on and equivalent to a company-specific historical mean.

By contrast, going forward, for most metrics the SQ benchmarks have no such direct and explicit link to historical performance because Company performance will be measured for Glide Path metrics against a statewide standard, i.e., the Statewide Mean, not against each Company's own historical mean. For these purposes, the term "Statewide Mean" is somewhat of a misnomer. Mathematically, it is indeed a mean (representing the last 18 years of performance on a statewide basis); however, the Statewide Mean in our new paradigm should be thought of as the penalty threshold that the Department has set with reference to statewide data and its own expertise. The penalty threshold was derived from a mean, but does not have the same statistical significance as the earlier company-specific historical means utilized under the current service quality regime. The standard of performance going forward is "improved service," and there is no direct numerical equivalent in the new framework to the "historical level of service" used in the current service quality regime. For that reason, the Department has determined that for most metrics the elimination of the deadband or penalty-free zone is appropriate.[33]

Second, we have eliminated the application of offsets. The Department has based that decision on a number of considerations, among them our commitment to improved service

33 While no explicit deadband exists, we expect that Companies will still aim to perform better than the penalty threshold, effectively creating their own deadband.

quality, consumers' increased need for and expectation of excellent service, and the availability of new technologies that should enhance Companies' performance, as described more fully below.

Regarding the Companies' argument that offsets promote the most feasible and cost effective improvements in service quality, we note that we proposed to remove offsets precisely to remove the incentive for Companies to make investments to achieve very high performance in some areas only, rather than achieving improvements in all metrics. Regarding the argument about the detrimental effects of an SQ program that is overly focused on exacting penalties, we note that exacting penalties is not the Department's purpose; instead, we update the SQ Guidelines to provide appropriate direction and incentives for Companies to achieve improved service quality in important areas. Indeed, the Department hopes that Companies will meet the revised standards, in which case no penalties will apply.

Regarding the Companies' argument that offsets incent Companies to go beyond the required minimum, we note that the three-year rolling average reporting option will achieve many of the goals articulated by the Companies regarding offsets. This new mechanism will provide a consistent incentive for the Companies to achieve the best results they can, even beyond the minimum standard, because superior performance in a given year provides protection against the possibility of penalties in subsequent years.[34] Further, as we stated earlier, we never expect Companies to strive for minimum performance; indeed, if a Company chose to target

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[34] The Department has previously noted that "the presence of offsets in the Guidelines has already had the unintended consequence of 'masking' less than desirable performance in some SQ categories." D.P.U. 12-120-B at 12, quoting D.P.U. 04-116-A at 47.

minimum performance, rather than something better than minimum, they would be more likely to incur a penalty.

With respect to Northeast Utilities' claims that the Department is bound by the doctrine of reasoned consistency to adhere to its developed ratemaking and regulatory principles, we note that the doctrine of reasoned consistency does not prevent the Department from changing course within the bounds of our SQ authority. Instead, it requires that the Department explain the reasons for any changes, which we do in D.P.U. 12-120-B and this Order. See Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd., 448 Mass. 45, 56 (2006) (the requirement of "reasoned consistency" means only that any change from an established pattern of conduct must be explained); Robinson v. Department of Pub. Utils., 416 Mass. 668, 673 (1993) (any change from an established pattern of conduct must be explained).

Based on the above, including the addition of new mechanisms to address Commenters' concerns, the Department finds that offsets (and in certain cases deadbands) are not necessary or appropriate as part of the new SQ Guidelines adopted in this Order, and therefore they have been removed from the SQ Guidelines we adopt today.

V. ELECTRIC COMPANY METRICS

A. SAIDI/SAIFI

1. Introduction

In D.P.U. 12-120-B, the Department proposed several changes to the SAIDI and SAIFI penalty metrics. These include moving SAIDI and SAIFI standards from no-degradation to continuous improvement through the Glide Path Method and application of the three-year rolling average reporting option. Additionally, in D.P.U. 12-120-B, we proposed to use a statewide

18-year average of SAIDI and SAIFI data to establish the penalty threshold that would apply at the end of the ten-year Glide Path.

In Section IV, above, the Department made several determinations regarding the penalty framework that apply specifically to SAIDI and SAIFI. Specifically, the Department modified the Glide Path Method such that for the first three years of the new SQ Guidelines each Company will continue to measure its performance against its current company-specific, ten-year fixed historical benchmark; therefore, a Company will not incur a penalty if its performance (i.e., either the annual performance or three-year rolling average) is within one standard deviation of its historical mean. Following the first three-year period, the penalty threshold will shift from that current level (i.e., company-specific historical mean plus one standard deviation) via a Company specific Glide Path to a reach a common statewide target in ten years (i.e., statewide mean based on 1996-2013 data for all Electric Companies).[35] Additionally, the Department provided that the Companies have a three-year rolling average reporting option, which allows a Company to report either its performance data for the current reporting year or its performance data for the average of the current year and the prior two years, for penalty purposes.[36] In this section we address (1) the appropriate calculation period for the statewide mean applicable to

35 As we have noted earlier, this Glide Path Method specifies that the thresholds at which penalties apply (and are capped) will be made more stringent through three equal steps, every three years, in gradations of one-third of the difference between the year-ten penalty threshold target and each Company’s current penalty thresholds.

36 If electing the three-year rolling average reporting option for penalty purposes, Companies must also provide the Department with their SAIDI and SAIFI average for the relevant reporting year.

SAIDI and SAIFI; (2) the appropriate implementation date for the new SAIDI/ SAIFI standard; and (3) considerations specific to Nantucket Electric Company

2. Summary of Comments

a. Calculation Period for Statewide Mean

The Attorney General and the Compact assert that using the proposed 18-year average of historical data to calculate the proposed statewide benchmarks for SAIDI and SAIFI is less ambitious than using most Companies' current performance (Attorney General Initial Comments at 3-4; Compact Reply Comments at 1, citing Attorney General Initial Comments at 2-3; Attorney General Reply Comments at 14; Attorney General Second Reply Comments at 2-5). For example, the Attorney General contends that the Electric Companies' performance in 2013 has already surpassed the Statewide Mean for SAIDI and SAIFI at the end of the proposed Glide Path period[37] (Attorney General Reply Comments at 14; Attorney General Second Reply Comments at 2-5). The Attorney General, therefore, argues that the proposed Glide Path Method for SAIDI/SAIFI should be made more stringent in order to motivate the Companies toward the Department's goal of continuous improvement, and she proposes several alternatives that would achieve this result (Attorney General Reply Comments at 14, citing O'Neill Report II, 2–6; Attorney General Second Reply Comments at 2-5). Specifically, the Attorney General proposes that the Department either (1) set the statewide benchmarks using all historical data and tighten

[37] The Attorney General asserts that both the Companies and the Department acknowledge that the Companies have already attained the 18-year statewide average for SAIDI (Attorney General Second Reply Comments at 2, citing Companies Joint Reply Comments at 7).

the deadbands,[38] or (2) base the Statewide Mean on the last three to four years of historical data from 2011 forward because these data reflect all of the significant trackers and base rate increases recently put into effect (Attorney General Second Reply Comments at 4; Attorney General Reply Comments at 17).

The Companies maintain that such a limited data set, as argued by the Attorney General, is insufficient to establish performance over time. The Companies argue that a more representative group of data would be the past ten years (Companies Joint Reply Comments at 6, citing Attorney General Initial Comments at 5-6). Further, National Grid argues that 17 years of data is too much because the data sets are fraught with inconsistencies because of paper versus digital systems, the implementation of new systems, and different interpretation of SQ rules among the Companies (National Grid Initial Comments at 23). Instead, National Grid proposes using the most recent ten years of historical data (2004 through 2013), weighted by the number of customers served, to calculate statewide benchmarks (National Grid Initial Comments at 21-22). National Grid argues that using this recent data increases the likelihood that the information was collected in a consistent and uniform manner similar to current practices (National Grid Initial Comments at 21-22).

The Companies agree with the Attorney General that Nantucket Electric Company's data for SAIDI and SAIFI is vastly different from that of the other electric Companies. The Companies argue that if the Department uses statewide benchmarks, the Department should use a

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[38] The Attorney General proposes to use five two-year Glide Path time periods rather than the three three-year Glide Path time periods proposed by Department (Attorney General Second Reply Comments at 4).

weighted average to account for Nantucket's data (Companies Reply Comments at 7, citing Attorney General Initial Comments at 3, n.1).

b. Implementation Date

The Attorney General supports an implementation date of January 1, 2015 for the revised SAIDI and SAIFI metrics, arguing that the Companies are already performing at the Statewide Mean for SAIDI and SAIFI (Attorney General Reply Comments at 27). The Companies claim that a transition period until 2019 is necessary to develop a standardized methodological approach to establish a Statewide Mean for SAIDI and SAIFI (Companies Joint Second Reply Comments at 36).[39] In the interim, the Companies recommend that they include in their Annual SQ Reports their respective SAIDI/SAIFI performance results using the Department's proposed Glide Path Method, for illustrative purposes only, as well as detailed outage information on weather events that are not Excludable Major Events, but resulted in a type 1 through 3 event under each of the Companies Emergency Response Plan (Companies Joint Second Reply Comments at 43). Additionally, the Companies propose that the Department convene a SAIDI/SAIFI Working Group to review and standardize the Companies' data as well as to recommend a normalization algorithm addressing the differences in system-specific performance drivers (Companies Joint Second Reply Comments at 43). The Companies argue that beginning January 1, 2015, the Department should establish the Statewide Mean using data from 1996

39 The Companies maintain that a 2019 implementation date will allow time to achieve consistency among the Department's Service Quality Guidelines, Grid Modernization efforts (D.P.U. 12-76), and Emergency Response Plan ("ERP") requirements (Companies Joint Second Reply Comments at 40).

through 2013 for comparative purposes, but not for penalty purposes until the reporting year 2019 (Companies Joint Second Reply Comments at 42).

3. Analysis and Findings

a. Calculation Period for the Statewide Mean Benchmark

The Department must determine the appropriate calculation period for the Statewide Mean, which will be the penalty threshold in ten years. While the Department agrees with the Attorney General and the Compact that SQ standards computed from the full 18-year historical SQ data base are less ambitious than standards computed from the last five years of historical data (due to the fact that Electric Company performance has improved over time), the Department also notes the statistical advantages of using standards derived from a more robust historical data set than the Attorney General's proposed three to four years. The Department also disagrees with National Grid's assertion that the historical data is fraught with inconsistencies. We base our standards on the same data that the Companies have submitted to the Department as legitimate representation of their performance every year in their Annual SQ Reports. Accordingly, we conclude that the benchmark against which Electric Company SAIDI and SAIFI performance will be measured in ten years will be equal to the Statewide Mean established using the full set of aggregated historical data (1996-2013). With respect to the Companies' arguments related to weighting in order to control for Company size, we note that we achieve the same results through aggregating all the Companies' data over 18 years.

b. Implementation Dates for SAIDI and SAIFI

The Department finds that an implementation date of January 1, 2015 is reasonable for SAIDI and SAIFI. Starting in 2015 the Companies will begin implementing the data gathering and reporting methods and submit their 2015 Annual SQ Report pursuant to this Order. In practice, this implementation schedule will allow the Companies three years (i.e., the first three years of the Glide Path) to use the same mean and standard deviation that are currently in place under the D.P.U 04-116-C SQ Guidelines. We decline to wait until 2019 to implement the new SAIDI and SAIFI metrics because the revisions to the Glide Path will allow ample transition time for the Companies to ramp up and plan accordingly. In addition, because all the Companies' SAIDI/SAIFI performance results in 2013 are below their penalty thresholds, this will benefit the Companies' three-year averages for the year 2015. The Department therefore concludes there is no need for the Companies to report data for illustrative purposes. Since the SAIDI/SAIFI Glide Path Method is derived from the Companies' reported data from the past 18 years, it would be inconsistent to change the method of gathering and reporting data, and therefore the Department has determined that there is no need for a SAIDI/SAIFI Working Group to review, standardize, and/or normalize the data.

c. Nantucket Electric

In Section IV, above, we noted that Nantucket Electric is the one Electric Company for which moving to the Statewide Mean would create a less stringent benchmark than is currently in place for SAIDI and SAIFI. This result would be in conflict with the purpose of our revisions, which is to move beyond a system of no degradation to a system of improved performance. Therefore, for the present, Nantucket Electric will continue to be subject to its current company-specific, historical benchmark for SAIDI and SAIFI. Nantucket Electric will, however, have the three-year rolling average reporting option. National Grid may petition the

Department to consider combining the SQ reporting of Nantucket Electric and MECo in a future annual SQ Report filing.

B. CKAIDI/CKAIFI

1. Introduction

In D.P.U. 12-120-B, the Department proposed to maintain its existing penalty-eligible metric, Poor Circuit Remediation ("PCR"), which identifies the distribution feeders or circuits that have circuit average interruption duration and frequency indexes (respectively, "CKAIDI" and "CKAIFI") values for a reporting year that are among the highest (worst) five percent in an Electric Company's service territory. However, the Department proposed one modification to this metric.

In the current SQ Guidelines, if a circuit appears for two consecutive years as among the worst five percent of a Company's circuits, that circuit is classified as a "Problem Circuit." In year two, each Electric Company compares the mean CKAIDI and CKAIFI of its Problem Circuits to the mean CKAIDI and CKAIFI of its full set of circuits ("Comparison Test").[40] If the mean of the Problem Circuits differs from the mean of all of a Company's circuits by more than one standard deviation, and the Problem Circuits are not remediated (i.e., are still among the worst five percent of the Company's circuits) by the end of the third year, a penalty is imposed.[41] We stated that the purpose of the Comparison Test is to take into account when calculating a

40 In their comments, parties use different terms for the Comparison Test, including "Means Test" and "Standard Deviation Test." For purposes of consistency, we use the term "Comparison Test" throughout.

41 Companies can be penalized for CKAIDI only if they do not incur a penalty for SAIDI, and for CKAFI only if they do not incur a penalty for SAIFI.

penalty the relative performance of a circuit as compared with all of a Company's circuits. D.P.U. 12-120-B at 23.

In D.P.U. 12-120-B at 24, the Department proposed a modification to this metric to apply the Comparison Test in the third year instead of in the second year (i.e., to be used as a criterion for assessment of a penalty). To implement this change, the Department proposed to add an additional category, "Chronic Circuit." A Chronic Circuit is any Problem Circuit that appears among the worst five percent of a Company's circuits at the end of the third reporting year. D.P.U. 12-120-B at 24. According to the Department's proposal, if the mean of the CKAIDI/CKAIFI value of any Chronic Circuit(s) is greater than the mean plus one standard deviation of 100 percent of the Company's circuits in year three, the Company would incur a penalty for the poor performing circuit(s). D.P.U. 12-120-B at 24. By contrast, a Company would not incur a penalty if the mean CKAIDI/CKAIFI for any Chronic Circuit is less than or equal to the mean plus one standard deviation of 100 percent of a Company's circuits in year three (even if the circuit ranks in the worst five percent of the Company's circuits). D.P.U. 12-120-B at 24. Finally, consistent with the Department's general approach, the poor performing circuit metric will no longer be eligible for offsets. D.P.U. 12-120-B at 24.

2. Summary of Comments

Unitil contends that a better approach for the CKAIDI/CKAIFI methodology would be for Companies to improve Chronic Circuits in year three, instead of year two, and then submit a report on all Chronic Circuits, requiring that these circuits not appear on the poor performing circuit list in year four (Unitil Initial Comments, Brown Report at 24). Similarly, National Grid and Northeast Utilities propose that the Problem Circuits be identified in years one and two, remediation work be completed in year three, and if the Problem Circuits still remain in the top five percent of the worst performing circuits in the fourth year, the Company will then be subject to a penalty based on the mean plus one standard deviation test (National Grid Initial Comments at 23-24; Northeast Utilities Initial Comments at 33-34). National Grid and Northeast Utilities argue that the proposed changes to the Comparison Test no longer support the purpose of identifying problem circuits after a two-year period and allowing Companies to remediate circuits in the third year, nor provide any offset for remediation efforts (National Grid Initial Comments at 23-24; Northeast Utilities Initial Comments at 33-34). In sum, the Companies argue that applying the penalty in the fourth year better aligns the penalty with the timing needs to identify and remediate poor performing circuits (National Grid Initial Comments at 23-24; Northeast Utilities Initial Comments at 33-34).

The Electric Companies assert that the use of one standard deviation to determine whether a Chronic Circuit will result in a penalty is problematic (Unitil Initial Comments, Brown Report at 24-25; National Grid Initial Comments at 23-24; Northeast Utilities Initial Comments at 34). They assert that since Chronic Circuits are in the worst five percent of circuits, it is certain that all Chronic Circuits will fail the Comparison Test, as proposed, if circuit reliability follows a normal distribution (Unitil Initial Comments, Brown Report at 24-25; National Grid Initial Comments at 23-24; Northeast Utilities Initial Comments at 34).

To incentivize and reward Companies' efforts in circuit remediation, National Grid and Northeast Utilities argue that the CKAIDI/CKAIFI measures should exclude interruptions that are out of the Companies' control, such as car accident pole hits, de-energizing for public safety, and vandalism (National Grid Initial Comments at 24; Northeast Utilities Initial Comments at 34-35; Companies Joint Second Reply Comments at 46).

National Grid and Northeast Utilities further assert that the definition of "circuit" should be updated so that it aligns with current utility practice (National Grid Initial Comments at 25; Northeast Utilities Initial Comments at 35). The Electric Companies propose a revised definition of "circuit" (Companies Joint Second Reply Comments, Appendix B Redline at 2; Companies Joint Reply Comments at 7).[42] Additionally, the Electric Companies recommend that modifications to the PCR metric should be effective January 1, 2015 (Companies Joint Second Reply Comments at 46).

Regarding when the penalty should be applied, the Attorney General supports the Department's proposal that the PCR penalty be applied based on the third year and recommends that the Department deny the Companies' request that only circuits that are poor-performing circuits for four consecutive years, rather than three, be subject to a penalty (Attorney General Reply Comments at 19). Regarding the Comparison Test, the Attorney General questions the

[42] The Companies propose the following definition: 'Circuit' or 'Feeder' means a system of conductors through which electric energy is delivered to the consumer. A Circuit or Feeder begins at the terminals of the substation protective device or at the terminals of a supply line protective device and ends at the terminals of the customer's point of interconnection with the utility system. The customers normally supplied by a given circuit do not change circuit assignment for temporary system configuration changes such as maintenance switching or restoration activities. Supply lines that (1) do not have customers directly connected to them (connected only with a protective device such as a recloser), or (2) have customers with auto transfer capabilities that are achieved in less than a minute, are considered as non-reportable. Conversely, Circuits or Feeders connected to such supply lines via protective devices such as reclosers have a separate designation and are reportable. Primary or secondary network feeders are non-reportable because they by design do not result in customer interruption (Companies Joint Second Reply Comments, Appendix B, at 1-2).

rationale behind moving the CKAIDI/CKAIFI Comparison Test to the third year and suggests that an alternative would be for the Department to determine a fixed number that would be an acceptable level of worst circuit performance (Attorney General Initial Comments at 7).

3. Analysis and Findings

Currently, in order for a Company to incur a penalty under CKAIDI/ CKAIFI, circuit performance must meet two criteria: a circuit (or circuits) must be among the worst performing circuits for three consecutive years and the circuit(s) must "fail" the Comparison test. In D.P.U. 12-120-B, the Department proposed to change the time when the Comparison Test is applied from the second year to the third year of review in order to apply it in the same year as when the penalty is calculated. To enable this change, the Department also proposed to add the classification of "Chronic Circuit." After review of comments and as supported by the analysis below, we adopt this change. Regarding the comments by National Grid and Northeast Utilities that the Comparison Test should be applied in advance of when a penalty may be incurred, we note that the Companies may apply this test earlier if they find it useful internally for planning purposes to identify potential Chronic Circuits for remediation. However, given our purpose of determining whether a penalty is warranted, the Department will apply the Comparison Test in the third year. Beyond this proposed change, commenters raise several additional issues, which we address below.

We reject the Electric Companies' argument that the Department should change the period for which a circuit must be among a Company's worst five percent from three years to four years for penalty purposes. First, customers on a poor performing circuit should not have to endure poor performance for four years before a Company faces a penalty; such an approach does not send a sufficient signal or incentive for Companies to respond to poor performing circuits in a timely manner. In addition, we note that in D.T.E. 04-116 the Department moved the penalty application to the third year at the request of the Electric Companies based on their planning needs, reflecting the view that three years is sufficient time to repair problem circuits. D.T.E. 04-116-B at 25-26. Thus, the PCR metric penalty will continue to be calculated based on the circuits that are poor performing and have remained on the Company's worst five percent circuit list for three consecutive years.

Several Companies addressed the calculation method of the Comparison Test. These Companies contend that the current method of calculation is problematic, arguing that because Chronic Circuits are in the worst five percent of circuits, it is certain that all Chronic Circuits will fail the Comparison Test if circuit reliability follows a normal distribution. We are persuaded to change the calculation method for this test to establish a fixed threshold for the Comparison Test. The fixed threshold will consist of the 18-year mean of the statewide SAIDI and SAIFI data, plus two standard deviations. Therefore, going forward, the mean CKAIDI or CKAIFI value of any Chronic Circuit(s) in the third year (i.e., that is among the worst five percent of a Company's circuits for three consecutive years) will be compared to a statewide 18-year mean (as calculated in the SAIDI and SAIFI Glide Path Method) plus two standard deviations (based on the 18-year statewide SAIDI and SAIFI data).[43] This change makes the Comparison Test a sufficient

[43] For CKAIDI, the statewide average and one standard deviation values are 114.929 and 27.549 minutes, respectively. For CKAIFI, the statewide average and one standard deviation values are 1.114 and 0.177, respectively. Therefore, if the CKAIDI of Chronic Circuit(s) average value is less than or equal to 169.847 minutes, then a penalty shall not be imposed. If the CKAIFI of Chronic Circuit(s) average value is less than or equal to 1.468, then a penalty shall not be imposed.

threshold by which to determine whether a Company has improved its overall circuit performance to such a degree that, even though a particular circuit may otherwise qualify as a Chronic Circuit, the actual performance of that circuit is satisfactory. Also, this approach is consistent with the Department's intention that all Commonwealth ratepayers receive similar service quality. The revised metric will be implemented as of January 1, 2015.

Regarding the Companies' request for exclusion of interruptions outside of the Companies' control, we note that the Companies always may individually petition the Department if such an occasion arises. Regarding the definition of "circuit" proposed by the Companies, we adopt the proposed definition with one modification, as it more accurately depicts current Electric Company practices. We adopt the proposed definition, except that we eliminate the clause that addresses "supply lines that have customers with auto transfer capabilities that are achieved in less than a minute." While such data should not be included in the calculations for the penalty metrics SAIDI, SAIFI, CKAIDI, and CKAIFI, such data should be reported to the extent possible, i.e., as MAIFI data. See SQ Guidelines at 2.

C. CEMI/CELID

1. Introduction

In D.P.U 12-120-B at 25-26, the Department proposed that each Electric Company submit a status report, in its annual SQ Report, discussing the Company's increasing ability to capture data related to Customers Experiencing Multiple Interruptions ("CEMI") and Customers Experiencing Long Interruption Durations ("CELID"). In particular, the Department proposed that the status report address a Company's increased capability to capture CEMI/CELID performance data, as a percentage of the total number of customers served by the Company. D.P.U 12-120-B at 25-26.

2. Summary of Comments

The Attorney General argues that CEMI/CELID should eventually become a penalty-eligible metric (Attorney General Initial Comments at 7). Additionally, she suggests that the Department expand the proposed reporting requirement to include Companies' CEMI/CELID data using approximations based on available data and a status report on resolving issues of data quality (Attorney General Initial Comments at 7). The Attorney General further recommends that the Department communicate to the Companies that the CEMI/CELID metrics will be penalty-eligible within five years from the adoption of the revised SQ Guidelines (Attorney General Initial Comments at 7).

The Companies generally argue that CEMI/CELID should be a reporting-only metric (Companies Joint Reply Comments at 7). Unitil asserts that the CEMI/CELID metrics are not ideal for setting targets or assessing penalties, but rather only for tracking (Unitil Initial Comments, Brown Report at 19). Unitil argues that because CEMI and CELID measure issues experienced by individual customers, use of these metrics for penalties can create a perverse incentive to focus on specific outages at the expense of larger system issues (Unitil Initial Comments, Brown Report at 19). Unitil states that it will be expensive to dramatically improve reliability in the CEMI/CELID metric to below-threshold levels, and that Companies will be incentivized to focus on bringing customers that are just above the threshold to just below the threshold (Unitil Initial Comments, Brown Report at 19). In response to the Attorney General's suggestion to collect approximate data and setting a timeline for establishing a penalty metric for

CEMI/ CELID, the Companies assert that this is inappropriate because the Department needs to allow time to develop a valid database (Companies Joint Reply Comments at 7-8, citing Attorney General Initial Comments at 7).

3. Analysis and Findings

Customer-specific circuit metrics, CEMI and CELID, reflect the individual customer's personal experience of electric service quality and, therefore, are important metrics to evaluate. However, we recognize that customer-level interruptions are difficult to measure with the Companies' current technology. The Department disagrees with the Attorney General's contention that the CEMI/CELID metric should be reported using approximations, as it is imperative that reported data is as accurate as possible. Therefore, the Department maintains that, as proposed, Companies shall submit a status report on their ability to accurately determine their CEMI and CELID data, including as a percentage of the total number of customers served by the Company. This metric will be implemented as of January 1, 2015. In light of the Companies' continued advancements in grid modernization, we expect that Companies' capabilities for capturing this data will improve over time. Similarly, the Department declines to set a fixed timeline whereby CEMI/ CELID will become penalty metrics. At a future date, the Department will determine whether, based on improved data collection capability, it is appropriate to make CEMI and/or CELID metrics subject to a penalty.

D. MAIFI

1. Introduction

In D.P.U. 12-120-B at 26-28, the Department proposed that Electric Companies report their ability to collect data on momentary outages of less than one minute, Momentary Average

Interruption Frequency Index ("MAIFI"). In particular, the Department proposed to require the Electric Companies: (1) to submit in their Annual SQ reports a status report on their increased ability to measure momentary outages; and (2) to report in the annual SQ reports any and all MAIFI data that they were able to collect in the reporting year. D.P.U. 12-120-B at 26-28.

2. Summary of Comments

The Attorney General supports the Department's proposal to require Companies to report any and all MAIFI data that Companies are able to gather and to report the status of the Companies' ability to accurately gather MAIFI data (Attorney General Initial Comments at 7). The Attorney General also recommends that the Electric Companies be directed to track MAIFI data with the intent of transitioning to a penalty-eligible metric in less than five years from the adoption of the revised SQ Guidelines (Attorney General Initial Comments at 7).

The Companies support the Department's proposal to include MAIFI data in the annual SQ filings for reporting purposes only (Companies Joint Reply Comments at 7-8). In response to the Attorney General's suggestion to collect approximate data and set a timeline for establishing a penalty metric for MAIFI, the Companies reiterate their arguments regarding CEMI/ CELID, including that the Department needs to allow time to develop a valid database before establishing MAIFI penalties (Companies Joint Reply Comments at 7-8, citing Attorney General Initial Comments at 7). Unitil also asserts that MAIFI is not an ideal metric for setting targets or assessing penalties, but rather should be used only for tracking purposes, adding that an increase in momentary interruptions is not necessarily indicative of deteriorating reliability (Unitil Initial Comments, Brown Report at 19).

Finally, the Electric Companies recommend that the Department change the definition of MAIFI, such that MAIFI captures all short-term interruptions between one and five minutes, rather than one minute or less (Companies Joint Reply Comments at 8; Companies Joint Second Reply Comments at 54). By extension, therefore, the Electric Companies argue that outages between one and five minutes, which are currently included in SAIDI and SAIFI, should be excluded from SAIDI and SAIFI and instead be captured in MAIFI reporting (Unitil Initial Comments, Brown Report at 19; Companies Joint Reply Comments at 8). In support of this argument, the Electric Companies claim that as grid modernization progresses and distribution automation increases, restoration of power may require more than one minute of time (Companies Joint Reply Comments at 8).

3. Analysis and Findings

The Department acknowledges that not all Companies are currently capable of collecting the data necessary to calculate an accurate MAIFI metric. However, we expect that with the implementation of grid modernization and advanced technology, the Companies will increasingly gain the capability to collect this data. In addition, we find that further analysis will be necessary before determining if MAIFI would be an effective penalty metric under the Department's SQ program. Therefore, we do not accept the Attorney General's recommendation that the Companies be directed to track MAIFI data with the intent of transitioning to a penalty metric in a set number of years. Rather, we require the Electric Companies to (1) submit in their Annual SQ reports a status report on their increased ability to measure momentary outages; and (2) report in the annual SQ reports any and all MAIFI data that they were able to collect in the reporting year. This metric will be implemented as of January 1, 2015.

Further, the Department rejects the Electric Companies' recommendation to change the definition of MAIFI and exclude from SAIDI and SAIFI outages of one to five minutes. The Department notes that outages of less than five minutes but greater than one minute have been included in SQ program historically. We find that changing this standard would present problems with assuring consistent and comparable historical data, and would result in less stringent reliability requirements going forward. We recognize the Electric Companies' argument that the deployment of automated technologies designed to reduce the frequency and duration of more significant outages could potentially result in some increased outages of between one and five minutes. However, at this point, the Companies have not provided evidence that there is likely to be a material increase in outages between one and five minutes in the near term, and we are not persuaded that the benefit of such a change merits switching to a less rigorous standard. Finally, we note that Companies may avail themselves of the opportunity to present such information in the context of an annual SQ filing.

E. Downed-Wire Response

1. Introduction

Under the current SQ Guidelines, Electric Companies report their downed-wire response times in their annual SQ reports to the Department.[44] D.P.U. 12-20-B at 28-29, citing D.P.U. 08-112, at 2. In D.P.U. 12-120-B, the Department proposed a penalty-eligible metric for Downed-Wire Response that would be applicable during blue sky days[45] for Priority 1 and

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44 As defined in the SQ Guidelines, Downed-Wire Response applies to various types of emergency events, the vast majority of which are actual downed wires..

45 The Department has defined "blue sky days" as all days of the year except for days with Excludable Major Events. D.P.U. 12-120-B at 31, n. 28. "Excludable Major Event"

Priority 2 downed-wire calls.[46] D.P.U. 12-120-B at 32. Under the proposal, all Electric Companies would be required to respond to 98 percent of Priority 1 calls within one hour and 95 percent of Priority 2 calls within two hours. D.P.U. 12-120-B at 31-32.

2. Summary of Comments

The Electric Companies argue that the Department's proposed response times are not based on historical data and that there is, therefore, no evidence to show that the standards will be achievable (Companies Joint Second Reply Comments at 47; National Grid Initial Comments at 28). Northeast Utilities also argues that the Downed-Wire Response metric should not be subject to a penalty because of the unpredictable and varying nature of weather events that lead to downed wires (Northeast Utilities Initial Comments at 35-36).

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means a major interruption event that meets one of the three following criteria: (1) the event is caused by earthquake, fire or storm of sufficient intensity to give rise to a state of emergency being proclaimed by the Governor (as provided under the Massachusetts Civil Defense Act); (2) any other event that causes an unplanned interruption of service to 15 percent or more of the Electric Company's total customers in the Electric Company's entire service territory; or (3) the event was a result of the failure of another Company's transmission or power supply system. Notwithstanding the foregoing criteria, an interruption event caused by extreme temperature condition is not an Excludable Major Event. D.T.E. 04-116-C, Appendix 2007, at 3. The Department addresses Downed-Wire Response during Excludable Major Events as part of our Emergency Response Guidelines and regulations. D.P.U. 12-120-B at 32, n. 29

46 "Priority 1 Downed Wires: Life Threatening / Imminent Danger" means an event in which utility equipment is preventing emergency response personnel from performing rescue efforts and/or administering first-aid treatment to a person or persons who may be injured or in danger of being injured. "Priority 2 Downed Wires: Hindering Emergency Operation" means an event in which utility equipment is preventing emergency response personnel from responding to an emergency situation which is not considered life threatening, yet requires the attention of emergency response personnel. "Priority 3 Downed Wires: Non-Threatening Electrical Hazard" means an event in which utility equipment created the need for emergency response personnel and/or apparatus to remain on the scene in order to protect the public from the hazard created by the utility's equipment.

The Electric Companies also argue that the definition of Excludable Major Event should be revised for purposes of a Downed-Wire Response metric in the SQ Guidelines to coincide with Electric Company Emergency Response Plans ("ERP") (Northeast Utilities Initial Comments at 35-36; National Grid Initial Comments at 26; Unitil Initial Comments, Brown Report at 25-26). Specifically, the Electric Companies argue that a penalty-eligible Downed-Wire Response metric for SQ should not apply on days when a Company has declared a Type 1, 2, or 3 event[47] under its Emergency Response Plan ("ERP") (Northeast Utilities Initial Comments at 35-36; National Grid Initial Comments at 26). In addition, Northeast Utilities suggests that only calls received from municipal officials be counted towards the metric and that the Companies be permitted to reclassify the priority of calls based on actual conditions observed in the field (Northeast Utilities Initial Comments at 37). The Electric Companies argue that the Department already imposes penalties associated with emergency response, including downed wires, and should not include penalties for those same events in the SQ Guidelines (Northeast Utilities Initial Comments at 35-36, citing G.L. c. 164, §§ 1J, 85B; 220 C.M.R. § 19.00 et seq.; National Grid Initial Comments at 26).

The Electric Companies recommend that if the Department institutes this metric, the Department should use average annual response times (Unitil Initial Comments, Brown Report at 25; National Grid Initial Comments at 2; Companies Joint Second Reply Comments at 50). Unitil argues that using average response times will help correct for small sample sizes where small Companies have few downed-wire events and would avoid harsh penalties for a single

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[47] Type 1, 2, and 3 events are classifications from the ERPs for emergency events that reflect the most significant levels of customer outages and the most significant levels of Company preparation and response.

instance of missing the benchmark (Unitil Initial Comments, Brown Report at 25). The Companies also recommend that they should first collect downed-wire data on days when an ERP type 1, 2, or 3 event is not declared, and that a working group should be established to determine if the one- and two- hour benchmarks are reasonable based on the data collected (Companies Joint Second Reply Comments at 50-51). The Electric Companies also argue that before a penalty is applied, a Company should have the opportunity to show whether events that cause a Company to fail to meet the standard were the result of coordination with affected municipalities, and for which the municipality agreed to longer response times (Companies Joint Second Reply Comments at 50-51). The Companies argue that in such a process, the affected Company would provide documentation for the event, which would be removed from the Company's downed-wire results (Companies Joint Second Reply Comments at 50-51).

The Attorney General supports the Department's proposed Downed-Wire Response metric (Attorney General Initial Comments at 7). The Attorney General supports limiting the Downed-Wire Response metric to Priority 1 and Priority 2 calls, arguing that the proposed metric appropriately focuses on calls that may constitute a true public hazard and for which the Electric Companies should design an adequate response mechanism (Attorney General Reply Comments at 23). The Attorney General disagrees with recommendations to limit the Downed-Wire Response metric to those events that are not addressed through ERP types 1-3 (Attorney General Reply Comments at 23). The Attorney General agrees that the existing ERP and storm review process may subject the Electric Companies to fines, but notes that the fines are not automatic as they are under the SQ Guidelines (Attorney General Reply Comments at 23). Also, the Attorney General states that the Department should not adopt the Companies' suggestions to measure Downed-Wire Response by an average response time (Attorney General Reply Comments at 23-24).

3. Analysis and Findings

The Department has previously found it appropriate to establish an SQ metric related to public safety. In particular, in D.T.E. 99-84, the Department established a penalty metric for Odor Call Response recognizing the public safety implications related to responding to gas Odor Calls. D.T.E. 99-84, at 39-40 (June 29, 2001). Similarly, the purpose of the Downed-Wire Response metric is to ensure that: (1) public safety associated with the electric system is addressed in a timely manner, and (2) public safety officials who respond to emergency calls are relieved in a timely manner from guarding the Electric Companies' facilities. See D.P.U. 12-120-B at 31). The Electric Companies have previously indicated that they respond to all downed-wire calls in order to ensure public safety. D.T.E. 04-116-A at 38. Further, in D.T.E 04-116-A at 38, the Department found that it is essential that the Electric Companies identify the nature of the emergency calls instantly so that appropriate priority is given for Companies to respond promptly. Therefore, we find that it appropriate to adopt this metric.

The Department rejects the Electric Companies' arguments that the Department's proposed benchmark is not based on historical data and that there is no evidence to support that the standards will be achievable. The Electric Companies have been providing significant data on Downed-Wire Response in their SQ filings since 2008. While we recognize that this information is not presented in a manner that aligns exactly with our proposed Downed-Wire Response metric, the Department finds that it nonetheless provides a rich dataset that is more than adequate for the Department to establish the penalty benchmark going forward (see Exhs.

DPU-NGRID-3-25; DPU-NU-3-25; DPU-FGE-3-25). Based on our analysis of the Companies' historical data, we find that the penalty benchmark proposed below is reasonably achievable and appropriate.

As recommended by the Electric Companies, we revise the proposed Downed-Wire Response metric to allow each Company to average its Downed-Wire Response time for the year when determining its Downed-Wire Response performance. Specifically, the Downed-Wire Response benchmark will be an annual average response time of one hour for 98 percent of Priority 1 calls and an annual average response time of two hours for 95 percent of Priority 2 calls.

While the Attorney General does not support a Downed-Wire Response benchmark based on average response time, we find it appropriate to make this change for several reasons. First, using average response time and setting the benchmark at less than 100 percent of downed-wire calls should alleviate the Electric Companies' concern regarding historical data, as this standard provides more flexibility than the standard originally proposed by the Department. Also, we agree with the Companies that using average response time will normalize the impact of a smaller sample size, particularly for smaller Companies, thus protecting them from receiving the full penalty based on a single event. Furthermore, allowing Companies to average response time data and setting the benchmark at less than 100 percent of downed-wire calls addresses the Companies' concern regarding responding to high numbers of downed wires during relatively large storms that do not qualify as Excludable Major Events. Companies must continue to report all Downed-Wire Response times,[48] for reporting purposes; the Department will use that data to determine if a more stringent metric is appropriate in the future. See SQ Guidelines at 14-15.

The Electric Companies also raised concerns regarding the potential overlap between the ERP Guidelines and the SQ Guidelines, i.e., that certain Downed-Wire Response data could be included in both SQ performance results and in emergency preparation and restoration of service investigations, and recommended that the definition of "blue sky day" be changed to prevent such overlap. The Department declines to adopt the Companies' recommended definition change. As an initial matter, the Department notes that any overlap that may occur between the SQ program and the ERP Guidelines is not restricted to the Downed-Wires Response metric. For example, SAIDI and SAIFI performance data included in the SQ program also may apply to emergency events that would not be excluded as Excludable Major Events. Further, we agree with the Attorney General that the penalties related to emergency preparation and restoration of service are not automatic, but applied only on a case-by-case basis after a Department investigation. Also, the SQ program is designed to measure performance over a full calendar year, whereas Department review of a Company's emergency preparation and restoration of service performance occurs only in limited circumstances, such as when the adequacy of a Company's emergency response is in question. To the extent that a Company is penalized under the SQ Guidelines and then is investigated pursuant to its emergency preparation and restoration of service obligations, the Department can decide at that time the appropriate manner to handle any overlapping issues. Finally, the definitions of Excludable Major Events and, by extension,

[48] Companies shall report Downed-Wire Response information using the template attached as Attachment B. The reporting requirement includes Priority 3 calls.

"blue sky days," apply to all SQ metrics; therefore, it is appropriate to apply these definitions consistently in the SQ program and not change the definition of "blue sky days" solely for the Downed-Wire Response metric.

The Electric Companies also requested that the Department consider the following exclusions from the Downed-Wire Response data to be used in calculating Company performance: (1) downed-wire calls from people other than municipal officials (i.e., include only Priority 1 and 2 calls from municipal officials); (2) calls regarding low-voltage wires, such as cable and telephone wires; (3) response times that are beyond the Companies' control; and (4) delays in response that result from coordination with municipal officials. Further, the Electric Companies requested that they be allowed to reclassify priority calls to reflect actual conditions on the ground, rather than maintaining the priority designation provided by the municipal officials. We address these issues in turn below.

With respect to the type of calls to be included in the Downed-Wire Response metric calculation, the existing SQ Guidelines require each Company to compile and report an annual average of its response times to formal emergency incidents reported by official emergency personnel, including the total duration of time between notification of a system incident and an arrival response by the Electric Company. D.T.E 04-116-C, Appendix 2007, at 19. We maintain this requirement and approach. Therefore, the Electric Companies may exclude emergency calls received from individuals other than the municipal officials and need include only Priority 1 and Priority 2 calls when calculating their Downed-Wire Response performance. Electric Companies must continue to track all downed-wire related calls (Priority 1 – Priority 3) and report this data annually. It is essential that the Electric Companies identify the nature of the emergency calls immediately so that appropriate priority is given and Companies respond promptly.

With respect to exclusion of low-voltage, cable and telephone wire related calls, the Electric Companies shall report all calls from municipal offices in response to which Company personnel was dispatched to respond to an emergency call. However, if the Company has properly identified the emergency call as involving a facility not belonging to the Electric Company and has coordinated a response through the telephone or cable companies, then such call need not be included in the Downed-Wire Response performance calculation.

With respect to excluding response time for reasons that are beyond the Companies' control, there may be instances in which an Electric Company has dispatched personnel to respond to a Priority call in a timely manner, but emergency response is hindered/delayed due to circumstances beyond the Company's control (such as blocked or unplowed streets). The Companies may exclude such instances from the Downed-Wire Response performance calculation.[49] With respect to the Companies' suggestion that they be allowed to exclude events for which longer response times resulted from coordination with affected municipalities, the Department declines to accept this recommendation. By allowing the Companies to calculate average response times for 98 and 95 percent of the annual Priority 1 and 2 downed wires, respectively, we are already allowing the Companies to exclude outlying data.

Finally, with respect to reclassifying the priority of downed-wire calls to reflect the situation "on the ground," rather than maintaining the priority designation provided by the

[49] These calls must be included in the report of all Downed-Wire Response times using the template provided.

municipal officials, we will allow the Companies to perform this reclassification. Each Company shall verify the data included in each priority call to ensure that the priority designation reflects actual conditions and is correctly reported to the Department. To minimize the instances of reclassifications, the Companies shall properly communicate with the municipal officials so that Priority designations are clearly understood by the municipality officials that are initially responsible for designating the call priorities. This metric will be implemented as of January 1, 2016.

F. Line Loss Reporting

1. Introduction

In D.P.U. 12-120-B, the Department did not propose changing the existing line loss reporting requirement, which mandates that each Electric Company submit in its annual SQ report technical and non-technical line loss information, both at system level and at varying voltage classes.[50] D.T.E. 04-116-C, Appendix 2007, at 15; D.P.U. 12-120-B, Attachment A, at 20.

2. Summary of Comments

The Companies request that the Department remove the requirement that line losses be reported by voltage class (Companies Joint Second Reply Comments at 54-55). The Companies argue that this information is either not available to report or onerous to obtain and report in a timely fashion (Companies Joint Second Reply Comments at 54-55). Additionally, the Companies request that the Department remove the requirement that line losses be reported

50 Technical losses are associated with the physical design and functioning of the electric power grid and its systems, whereas non-technical losses are associated with factors such as theft and consumption that is not accounted for by metering devices.

separately by technical and non-technical line losses, arguing that there is no way to separate out this information (Companies Joint Second Reply Comments at 54-55). DOER contends that there are inconsistencies between the Electric Companies' reporting of line losses and recommends that the Department clarify the line loss reporting requirements (DOER Initial Comments at 2). In particular, DOER requests clarification on what is meant by the term "reference conditions" in the SQ Guidelines (DOER Initial Comments at 2).

3. Analysis and Findings

While the Department did not propose to change the existing line loss reporting requirement in the SQ guidelines, several commenters suggest changes. The purpose of the SQ line loss reporting requirement is to monitor and ensure, at a high level, the efficiency of the transmission and distribution systems. Further, many factors contribute to overall line losses, including technical losses and non-technical losses. With deployment of grid modernization technologies, the Electric Companies will have greater opportunity and obligation to plan, measure, and improve transmission and distribution efficiency. Therefore, it is even more important to identify transmission and distribution losses at all levels of the electric system, i.e., at all voltage classes, and to take steps to reduce those losses. Increased knowledge about and the ability to reduce lines losses will achieve numerous important outcomes, including: aiding system planning; achieving operational system efficiencies and cost savings; bills savings for customers; and environmental benefits, including reductions in greenhouse gas and other emissions associated with electric generation. Therefore, the Department declines to delete or substantively change the line loss reporting requirements.

The Department recognizes DOER's concerns and acknowledges that Companies have varying capabilities with respect to capturing and/or estimating lines losses at various levels of their systems, particularly at the low end of the distribution levels. Recognizing the varying capabilities, the Department strongly encourages the Electric Companies to increase their capabilities to model and estimate losses with greater accuracy at all levels of the transmission and distribution system. We find value in monitoring the data the Companies are able to provide at this time. Reflecting our expectation that Companies' Grid Modernization Plans will address line loss improvements, the Department expects to further address this issue in our Grid Modernization Plan review. Finally, in response to DOER's request to clarify the term "reference conditions" in the SQ Guidelines, we change this term to "parameters, assumptions, and methodological approaches used in calculations." This metric will be implemented as of January 1, 2015.

G. Outage Reporting

In D.P.U. 12-120-B at 64, the Department proposed that Electric Companies submit a compilation of all interruptions experienced during the SQ year with the Annual SQ report.[51] The Department adopts this proposal as part of our revised SQ Guidelines. The Companies also suggest creating a new section heading for clarity (i.e., a new heading, but not new information) in the Guidelines entitled "Department's Outage and Accident Reporting Procedures," to include subheadings for "Reporting Electric Service Interruptions" and "Other Safety Performance Metrics" (Companies Second Reply Comments at 54-55; Appendix B Redline, at 28-30). The

[51] This requirement has previously been included as part of the Department's Emergency Response Plan Guidelines.

Department finds this clarification helpful and includes this proposal in our revised Guidelines.[52] See SQ Guidelines at 21-22. Additionally, we note that we have added a definition for "Critical Facility," as proposed by the Companies (Companies Joint Second Reply Comments at 54). See SQ Guidelines at 2.

VI. GAS COMPANY METRICS

A. Odor Call Response

1. Introduction

Under the current SQ Guidelines, each Gas Company must respond to 95 percent of all Class I and Class II Odor Calls ("Odor Calls") [53] within one hour or less with appropriately qualified emergency personnel. D.P.U. 04-116-C, Appendix 2007, at 11. If a Gas Company fails to reach the 95 percent benchmark, it is penalized on a fixed schedule. D.P.U. 04-116-C, Appendix 2007, at 11. The Department proposed to make the standard more stringent, requiring all Gas Companies to respond to 97 percent of all Class I and Class II Odor Calls within 45 minutes. D.P.U. 12-120-B at 36. The Department also proposed two new reporting requirements relating to Odor Calls. D.P.U. 12-120-B at 36. First, the Department proposed that each Gas Company provide a monthly exception report, identifying all of the Odor Call conditions during the month for which the Gas Company did not meet the standard. D.P.U. 12-120-B at 36. Second, the Department proposed that each Gas Company provide a

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52 We named the second subsection "Reporting Accidents" rather than "Other Safety Performance Metrics."

53 A Class I Odor Call is a call that relates to a strong odor of gas throughout a household or outdoor area, or a severe odor of gas from a particular area. A Class II Odor Call is a call involving an occasional or slight odor of gas at an appliance. D.T.E. 04-116-C, Appendix 2007, at 2.

monthly exception report specifying the instances in which a respondent to an Odor Call failed to properly activate the time measurement device inside the responding vehicle for those Gas Companies possessing an automatic time measurement device. D.P.U. 12-120-B at 36.

2. Summary of Comments

The Gas Companies support an increase in the benchmark from 95 to 97 percent of Odor Calls answered within 60 minutes, but not a decrease in the response time from 60 minutes to 45 minutes (Companies Joint Second Reply Comments at 28). The Gas Companies argue that the standard requiring them to respond to 97 percent of all Odor Calls in 45 minutes would require a substantial amount of investment in labor additions, training, and facilities expansion and could not be implemented by January 1, 2015 (Companies Joint Second Reply Comments at 28). For example, Liberty Utilities argues that it would need to acquire space for staff and equipment in the North Attleboro service area, and hire three full-time employees to work evening and overnight shifts in both of its service territories, while National Grid argues that it would need to hire 23 new full time employees (Liberty Utilities Initial Comments at 16; National Grid Initial Comments at 16). The Gas Companies point out that the cost of adding these employees and resources would be significant because the service technicians working these evening and overnight shifts would not be able to engage in any business other than responding to Odor Calls, which are inherently random and unpredictable (see, e.g., Northeast Utilities Initial Comments at 28; National Grid Initial Comments at 15-16; Companies Joint Second Reply Comments at 31). The Gas Companies also contend that the proposed Gas Odor Call Response metric is problematic when combined with the changes proposed to the Service Appointments metric because the implementation of both these elements together would impose the need for substantial increases in workforce resources (Companies Joint Second Reply Comments at 25). As an alternative, the Gas Companies recommend an increase in the standard from 95 percent to 97 percent of Odor Calls in 60 minutes, as well as requiring each Gas Company to report annually all its Odor Call response times in 15-minute intervals (Companies Joint Second Reply Comments at 32).[54]

The Gas Companies also recommend calculating Blackstone Gas's benchmark using a five-year rolling average due to its small size (Companies Joint Second Reply Comments at 32). Specifically, the Gas Companies assert that missing the 60 minute standard for one Odor Call would drop Blackstone's response rate to 92.9 percent (Companies Joint Second Reply Comments at 30). The Attorney General, NEGWA, and the Steelworkers Union support the proposed changes to the Odor Call metric and reporting requirements (Attorney General Initial Comments at 7-8; NEGWA Initial Comments at 1; Steelworkers Union Initial Comments at 2).

3. Analysis and Findings

The Department reiterates that public safety considerations make it essential for Gas Companies to achieve and maintain a high performance level for Odor Call responses. See D.T.E. 99-84, at 39 (June 29, 2001); D.T.E. 04-116-A, at 30. The Department has considered all of the comments regarding our proposed changes to the Odor Call standard in terms of the timing of the implementation, the need for additional hiring, training, and resources, and the interplay between the changes to the Odor Call Response and Service Appointments metrics. The Department is persuaded that the change to a shorter time frame together with the higher

54 The Companies say that this benchmark could be implemented as of January 1, 2015 (Companies Joint Second Reply Comments at 32).

response rate would likely require labor additions, training and qualification of personnel, and expansion of facilities, all of which will take time to implement. For some Gas Companies, the costs may be higher than for others, given the geographic coverage of their service areas. Accordingly, we conclude that an increase to 97 percent while maintaining the 60-minute response time strikes a reasonable balance between our desire to improve service quality and public safety and the potential for significant additional costs that are ultimately borne by the ratepayers. Therefore, the Department modifies the current benchmark to require that Gas Companies respond to 97 percent of all Class I and Class II Odor Calls within 60 minutes. The Department directs all Gas Companies to measure and report annual Odor Call Response times in 15-minute intervals as of January 1, 2015. This will allow us to monitor and evaluate whether additional changes to the benchmark are warranted in the future.

In addition, the Department adopts our proposed reporting requirements of two monthly exception reports. First, the Department requires that each Gas Company provide a monthly exception report, identifying all the Class I and Class II Odor Call conditions during the month for which the Gas Company did not meet the 60-minute standard, including the date of the Odor Call, the location, the time by which the Gas Company's response exceeded 60 minutes, and the reason for failing to meet the standard. Second, the Department requires that each Gas Company provide a monthly exception report identifying the instances in which a Gas Company employee responding to an Odor Call failed to properly activate the time measurement device in the responding vehicle for those Gas Companies possessing an automatic time measurement device. This report shall include the date of the Odor Call, the time the Odor Call was received, the time the Gas Company dispatched its employee(s) to the location, the time the Gas Company employee arrived at the location, the time the on-site button was activated, the reason for not activating the on-site button appropriately, and identification of the person who authorized/entered the override. In addition to these two monthly reports, each Gas Company shall file an annual summary report with its annual SQ report summarizing the data from each of the monthly reports. These new requirements will be effective as of January 1, 2015.

In response to the Companies' recommendation that Blackstone Gas's Odor Call Response standard be calculated on a five-year rolling average, we do not agree. The Department considers Gas Companies' performance for Odor Call Response to be of extreme importance, regardless of the size of the local gas distribution Company. D.T.E. 99-84, at 40 (June 29, 2001). The Department is not persuaded that the smaller number of Odor Calls received by small gas distribution companies would affect either their Odor Call Response times or the reporting of those response times. D.T.E. 99-84, at 40 (June 29, 2001). Blackstone Gas' Odor Call Response standard is currently calculated on a single year basis, consistent with that of all Gas Companies, and that will not change with the increase to 97 percent response requirement. Thus, we will hold Blackstone Gas to the same standard as the other Gas Companies operating in the Commonwealth. Consistent with current practice, Blackstone Gas may petition the Department and request a waiver of the penalty in a particular year.

B. Gas Leak Repair

The Department proposed a penalty-eligible metric for gas leak repair, as well as reporting requirements relating to gas leaks. D.P.U. 12-120-B at 40-41. However, we will not adopt these measures at this time and will open a separate proceeding to develop SQ metrics that relate to gas leaks in light of the requirements of the recently passed legislation, An Act Relative to Natural Gas Leaks, Acts of 2014, Chapter 149.[55] The 15 percent portion of the SQ penalty cap assigned to Gas Leak Repair in our proposal will be reallocated Odor Call Response in this proceeding. Accordingly, we will not address the comments on these matters in this Order.

VII. LOST WORK TIME ACCIDENT RATE/RESTRICTED WORK DAY RATE

A. Introduction

The current SQ Guidelines contain a provision measuring each Company's Lost Work Time Accident Rate ("LWTA"). D.T.E. 04-116-C, Appendix 2007, at 11. This metric is intended to gauge worker safety, and measures the Incidence Rate of Lost Work Time Injuries and Illness per 200,000 Employee Hours as defined by the U.S. Department of Labor, Bureau of Labor Statistics. D.T.E. 99-84, at 19 (August 17, 2000); D.T.E. 04-116-C, Appendix 2007, at 3. The LWTA metric is currently subject to a penalty. D.T.E. 04-116-C, Appendix 2007, at 11. The current SQ Guidelines also contain a reporting requirement for Restricted Work Days ("RWD"), which measures the Incidence Rate of Restricted Work Time cases per 200,000 Employee Hours as defined by the U.S. Department of Labor, Bureau of Labor Statistics. D.T.E. 99-84, at 19 (August 17, 2000); D.T.E. 99-84, at 8-9 (June 29, 2001); D.T.E. 04-116-C, Appendix 2007, at 4, 15.

The Department proposed two major changes to these metrics. First, the Department proposed for LWTA to move to the Glide Path benchmarking method, which would require the Companies to meet a continuously improving statewide standard. D.P.U. 12-120-B at 61-62. Second, the Department proposed to make RWD a penalty-eligible metric, also subject to the

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55 We note that the scope of this separate proceeding has yet to be defined.

Glide Path benchmarking method. D.P.U. 12-120-B at 61-62. The Department also noted its goal of moving toward a zero-injury benchmark in five years. D.P.U. 12-120-B at 61-62.

B. Summary of Comments

The Companies argue that a zero-injury benchmark is impossible to attain because of factors that are outside the Companies' control such as vehicle collisions in the field (see, e.g., Liberty Utilities Initial Comments at 19; Companies Joint Reply Comments at 13-14; Companies Joint Second Reply Comments at 33-34). Additionally, the Companies argue that a statewide benchmark for LWTA and RWD is inappropriate due to variations in gas and electric operations as well as among service territories (see, e.g., Berkshire Initial Comments at 13; Companies Joint Reply Comments at 13-14; Companies Joint Second Reply Comments at 33). Some Companies also argue that associating penalties with worker injury rates is contrary to guidance issued in 2012 by the Occupational Safety and Health Administration ("OSHA") because the potential for penalties can discourage the reporting of injuries by employees (National Grid Initial Comments at 18, citing OSHA Memorandum on Employer Safety Incentive and Disincentive Policies and Practices (March 12, 2012); Northeast Utilities Initial Comments at 30).

Furthermore, the Companies and the Steelworkers Union argue that RWD should not be penalty-eligible (Companies Joint Second Reply Comments at 33-34; Steelworkers Union Initial Comments at 3). The Companies argue that restricted work time is not necessarily a result of safety issues, but of the fact that the Companies have an aging workforce and utility work can take a toll on employees (see, e.g., Berkshire Initial Comments at 15; Liberty Utilities Initial Comments at 19-20; Northeast Utilities Initial Comments at 31; see also Steelworkers Union Initial Comments at 3, citing D.T.E. 99-84, at 19 (August 17, 2000)). The Steelworkers Union also disagrees with the association of penalties with the RWD metric arguing that it is likely to result in Companies requiring workers to return to work prematurely (Steelworkers Union Initial Comments at 3). The Attorney General questions whether a statewide average is appropriate for worker safety metrics especially when it concerns smaller companies, but supports the use of a RWD rate for penalties (Attorney General Initial Comments at 9-10).

The Steelworkers Union also reiterates the recommendations it made at the outset of this proceeding, that the Department adopt three new, non-penalty occupational/public safety metrics for Gas Companies, including: (1) indicators tracking the use of temporary repairs and unrepaired hazards on inside services; (2) indicators tracking the percentage of service lines shut off at the gatebox prior to repairs, replacements and upgrades; and (3) indicators tracking the percentage of mains and services constructed consistent with existing Companies' operations and maintenance protocols (Steelworkers Union Initial Comments at 2).

C. Analysis and Findings

The Department has reconsidered our policy on LWTA and RWD and finds that the association of penalties with LWTA and RWD might have the opposite effect of our intention to promote safety. We are concerned that associating penalties with worker safety rates could result in workers avoiding the reporting of injuries.[56] Safety is of paramount concern to the Department and workers should not feel pressure to refrain from reporting their injuries to their employer.

[56] The Department makes no findings on the applicability of OSHA's May 12, 2012 guidance to the Department's SQ Guidelines.

With respect to the Steelworkers Union's proposal to add three new reporting requirements relating to gas worker safety, we reiterate our findings in D.P.U. 12-120-B that the proposal would be both difficult to measure and time consuming to measure reliably. D.P.U. 12-120-B at 42. The Department will consider, in the future, whether there are more appropriate ways to promote gas worker safety through penalty-eligible SQ measures.[57]

Going forward, the LWTA and RWD measures will be for reporting purposes only. The Department will, however, exercise its supervisory authority to investigate any Company if its LWTA/RWD rates are concerning. Accordingly, we do not address the participants' other comments on these measures in this Order. We also note that the Department is aware of industries that strive to meet a zero workplace injuries standard. While we recognize the difficulty for utility companies to achieve zero workplace injuries, we encourage the Companies to consider how to reduce workplace injury rates to the lowest possible level.

VIII. CUSTOMER SERVICE METRICS

A. Customer Complaints

1. Introduction

The current SQ Guidelines measure the number of Consumer Division Cases per 1,000 residential customers for each Company. D.T.E. 04-116-C, Appendix 2007, at 6-7.[58] Consumer Division Cases are residential complaints, as defined in the current SQ Guidelines,

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[57] The Department has stated its intention above to open a separate proceeding to develop metrics relating to gas leaks.

[58] The Department compiles monthly data on the number of Consumer Division Cases for each Gas and Electric Company, and provides this compiled data to each Gas and Electric Company. Each Company has 60 days to dispute the classification of a complaint as a Consumer Division Case.

that are made to and investigated by the Consumer Division. D.T.E. 04-116-C, Appendix 2007, at 6-7. Consumer Division Cases are currently limited to residential billing and termination issues, including issues relating to billing, credit, denial of service, meters, and service quality. Commercial and industrial complaints, sanitary code matters, referrals,[59] and rate matters are automatically excluded from the Consumer Division's monthly tabulation of cases for service quality annual reporting purposes provided to the Companies on a monthly basis. See D.T.E. 04-116-C, Appendix 2007, at 6-7. Each Company reports its performance on this metric to the Department annually (see, e.g., Bay State Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-01 (Filing); Berkshire Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-02 (Filing); Blackstone Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-03 (Filing).

In D.P.U. 12-120-B, the Department proposed to modify the current penalty-eligible Consumer Division Cases metric by expanding the scope of the metric to include for the first time commercial and industrial customer complaints received by the Department. D.P.U. 12-120-B at 56. Additionally, the Department clarified that the proposed metric would include all customer complaints to the Department (and referred to the Consumer Division), not just those complaints made directly to the Consumer Division through the hotline. D.P.U. 12-120-B at 56. The proposed metric, labeled "Customer Complaints," requires Companies to meet a statewide benchmark based on the mean of the cases recorded by the Department for the years 2011-2013. D.P.U. 12-120-B at 56.

59 "Referral" is a term used by the Consumer Division and the Companies to categorize certain types of customer contacts with the Consumer Division that are not counted as Consumer Division Cases for SQ purposes.

2. Summary of Comments

The Attorney General supports redefinition of Customer Complaints to include all customer complaints, whether residential, commercial, or industrial (Attorney General Initial Comments at 9). While the Companies state that they support the Department's efforts to establish a Customer Complaints metric, they recommend several modifications that they claim are necessary and appropriate for implementation of the metric (Companies Joint Second Reply Comments at 7).

First, the Companies strongly disagree with inclusion of commercial and industrial customers in the Customer Complaints metric (Companies Joint Second Reply Comments a 5). The Companies question whether the Department has the authority to include commercial and industrial customer complaints in this metric (CMA Initial Comments at 37; Liberty Utilities Initial Comments at 25; National Grid Initial Comments at 38). In addition, the Companies argue that their historical data does not generally include data on the number of complaints made by commercial and industrial customers (Companies Joint Second Reply Comments at 5). Further, the Companies contend that sophisticated commercial and industrial customers will leverage the Department's involvement in their complaints instead of working out a mutually agreeable resolution with the Companies as they often do now (Companies Joint Second Reply Comments at 6). In particular, Liberty Utilities argues that its complex rate structure will encourage repeat calls from commercial and industrial customers (Companies Second Joint Reply Comments at 5-6). The Companies, therefore, recommend excluding commercial and industrial customers from the Customer Complaints metric (Companies Joint Second Reply Comments at 7). In the event that the Department includes commercial and industrial customers in the Customer Complaints metric, the Companies argue that the Department should provide for collection of data on the number of commercial and industrial complaints over a three-year period beginning January 1, 2015, before setting a benchmark (Companies Joint Second Reply Comments at 8).

Second, the Companies encourage the Department to further define the term Customer Complaints (Companies Joint Second Reply Comments at 6-7). The Companies recommend that the Department exclude "prospective customers" from those eligible to make a Customer Complaint and establish a defined process to validate Customer Complaints and Customer Credit Cases historical data (Companies Joint Second Reply Comments at 7). In addition, the Companies argue that there should be further criteria for calls that would not be included as Customer Complaints, including: (1) simple customer inquiries; (2) instances when the Company correctly applies applicable law, orders, rules, standards or procedures; and (3) disputes associated with determining low-income rate eligibility (CMA Initial Comments at 37; Liberty Utilities Initial Comments at 26; Companies Joint Second Reply Comments at 6-7).

Third, the Companies seek a defined process for Companies to challenge the Department's categorization of a customer contact as a Customer Complaint for SQ purposes (Companies Joint Second Reply Comments at 8). The Companies note that the present process is not sufficiently formal to be associated with SQ penalties (Companies Joint Second Reply Comments at 7).

Fourth, while the Companies are in agreement that a statewide standard might be a reasonable approach for the Customer Complaints metric, they argue that the metric should not be implemented until some effort is made to validate the data composing the statewide benchmark (Companies Joint Second Reply Comments at 3, 8). The Companies request that the Department convene a Working Group to resolve these issues and establish a January 1, 2016 implementation date for the metric (Companies Joint Second Reply Comments at 1, 3, 5-6). The Companies also argue that the Working Group should establish an appropriate exception to this metric for small companies (Companies Joint Second Reply Comments at 5).

3. Analysis and Findings

a. Overview

The Department appreciates the thoughtful comments. After consideration of all the information and comments, the Department adopts many of the Companies' recommendations. Specifically, as discussed below, we modify the proposed Customer Complaints metric in the following manner: (1) Companies shall collect data regarding commercial and industrial complaints over a three-year period beginning January 1, 2015, before this type of complaint is included in the Customer Complaints metric in 2018; (2) we remove the reference to "prospective customers" as persons eligible to make a Customer Complaint in the proposed SQ Guidelines: (3) we further define what a Customer Complaint is; (4) we revise the process for disputing the Department's categorization of a customer contact as a Customer Complaint; and (5) we establish a process for verifying data and classifications of the Department's data from 2011 through 2013. Our proposal to apply a statewide mean benchmark and penalty formula based on the 2011-2013 statewide mean remains unchanged.

b. Commercial and Industrial Customer Complaints

We decline to adopt the Companies' recommendation to exclude commercial and industrial complaints from this metric. As an initial matter, the Department has clear authority to address complaints from commercial and industrial customers.[60] While we have exercised our authority to address complaints from commercial and industrial customers in limited circumstances, the Department's jurisdiction extends to disputes between commercial and industrial customers and utility companies. See, e.g., G.L. c. 164, § 76; Schreibner & Assoc. v. CTC Corporation, D.T.E. 02-86, at 9-11 (2003) (internal citations omitted).

The Department receives and addresses complaints from all customer types. Including commercial and industrial complaints in the Customer Complaints metric provides a more complete picture of the level of service provided by Companies to various customer types. In addition, the Department has, for many years, provided Companies a monthly categorization, by customer type, of all matters that were deemed complaints, including commercial and industrial complaints, whether or not complaints qualified as a Consumer Division Case for the SQ Guidelines. Further, with respect to the Companies' arguments that commercial and industrial customers might leverage the Department's involvement rather than work with the Company to resolve disagreements, the revised SQ Guidelines require that the customer contact the Company prior to lodging a Customer Complaint with the Department. Further, Companies already inform commercial and industrial customers of their right to contact the Department if there is a dispute regarding their bill, including the telephone numbers of the Consumer Division on the commercial and industrial bills. Commercial and industrial customers, therefore, are already aware that they can involve the Department in disputes with the Companies. With respect to the Companies' concern that some commercial and industrial customers will make repeat calls

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60 We note, however, that while we include commercial complaints in this metric, we are not making any changes to our billing and termination regulations at 220 C.M.R. § 25, et seq. at this time.

regarding the same issue, the Department does not intend to count the same matter multiple times, consistent with current practice with residential customers. For these reasons, the Department will include complaints we receive from all customers in the Customer Complaints metric.

The Department recognizes that the inclusion of all calls in the Customer Complaints metric may require administrative changes by the Companies. Thus, we will allow the Companies to review and track the Department's monthly log of commercial and industrial complaints (as they currently do for residential SQ matters) over a three-year period beginning January 1, 2015, before incorporating commercial and industrial customer complaints into the penalty–eligible metric in 2018.

c. Description of Customer Complaints

The proposed Customer Complaints metric uses the following criteria to categorize a customer contact with the Department as a Customer Complaint for SQ purposes: (1) the customer making the Customer Complaint provides his or her identity and is a current or former customer of the Company against which the Customer Complaint has been lodged; (2) the customer has contacted the Company from which the customer receives distribution service prior to lodging a Customer Complaint with the Department; and (3) the matter involves an issue or issues over which the Company has control and excludes matters described in [Customer Credit Cases].[61] A Customer Complaint will include all matters that are referred to and investigated by the Consumer Division, excluding sanitary code issues, matters coded by the Consumer Division as "referrals," and any matters that qualify as a Customer Credit Case. With respect to the

[61] Customer Credit Cases will be addressed below.

Companies' request that the definition of Customer Complaints exclude simple customer inquiries and matters where the Company has applied the law correctly, the Department will continue its practice of excluding these matters under the revised Customer Complaints metric.

The Department adopts the Companies' recommendation that the reference to "prospective customers" be eliminated. The Department's inclusion of the term "prospective customer" was intended to cover situations in which a Company does not fulfill its commitment to install new customer service. Because industry practice requires Companies to open a record or account upon such a request, the requesting party is a customer of record, whose complaint may be brought to the Department and included in the Customer Complaint metric.

Regarding disputes associated with determining low-income rate eligibility, the Department will not provide an automatic exclusion for SQ purposes.[62] These types of complaints need to be evaluated on a case-by-case basis. The Department expects Companies to have all of their customers, regardless of service level, on the most appropriate rate.

d. Disputing the Classification of a Customer Contact as a Customer Complaint

The Companies express concern regarding the process for challenging the Department's inclusion of particular customer contacts as Customer Complaints. Currently, there is a dispute process within the Consumer Division when a Company disputes the Department's classification. While the Department maintains that this is the most effective manner to handle disputes, we make some changes. Because reviews of complaint data occur monthly, the

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[62] We note that in D.P.U. 12-120-B we categorized these cases as Customer Credit Cases, but these matters should be categorized as Customer Complaints. See D.P.U. 12-120-B at 57-58.

Department intends to provide Companies with Customer Complaint statistics within 15 days of the close of each month. Once received, Companies will have 20 days to dispute any case classification with the Department's Consumer Division Director, or her designee. The Consumer Division will accept or reject a Company's dispute in 20 days from the date it receives the disputed classification. The revised SQ Guidelines include this timetable.

e. Data and Classifications 2011-2013

The Companies seek to review the Department's data classifications for 2011 through 2013 because, to date, the Companies have focused only on the data included in the Consumer Division Cases metric and have not tracked other types of customer contacts with the Department. The Department recognizes the importance of shared confidence in the integrity of the data used to set benchmarks. Thus, the Department will allow a Working Group to validate the Department's 2011-2013 data. The Department will convene a Working Group consisting of the Attorney General, the Low Income Network and the Companies to review the 2011-2013 Consumer Division data relating to Customer Complaints. This Working Group will validate the data the Department will use to set the benchmark for this metric. The Working Group will report its findings to the Department for the Department's consideration.

The Customer Complaints metric uses the Statewide Three-year Mean benchmarking method and penalty formula, including a Statewide Three-year Standard Deviation, as described in Section V of the revised SQ Guidelines. Companies are required to achieve a performance level equal to the Statewide Three-year Mean for the years 2011-2013; otherwise a penalty will apply. The Companies shall begin to track Customer Complaints and Customer Credit Cases consistent with the new metrics on January 1, 2015. The penalty portion shall be effective for performance year 2016, except for commercial complaints and industrial complaints.

Finally, regarding the impact of the new Customer Complaints metric on small companies, the Department is aware that Blackstone and Nantucket have less than a handful of Customer Complaints cases each year. Small Companies should address the specific impact of this metric on them in their first annual report under the new SQ Guidelines, as Blackstone has done in the past.

B. Customer Credit Cases

1. Introduction

The current SQ Guidelines do not have a separate metric regarding the credit complaints handled by the Department; rather, credit complaints are currently included in the Consumer Division Cases metric along with billing, denial of service, meters, and other customer service matters. In D.P.U. 12-120-B, the Department proposed to modify the current penalty-eligible Consumer Division Case metric by creating a new, separate penalty-eligible metric for credit complaints. D.P.U. 12-120-B at 58, Att. A at 10. The proposed metric, labeled Customer Credit Cases, requires Companies to meet a statewide benchmark based on the average number of aggregated Customer Credit Cases recorded by the Department for the years 2011-2013. D.P.U. 12-120-B at 58.

2. Summary of Comments

The Attorney General supports the new penalty-eligible Customer Credit Cases metric to draw attention to the goal of affordable service for low-income residential customers (Attorney General Initial Comments at 9). The Low-Income Network also supports the proposed Customer

Credit Cases metric (Low-Income Network Initial Comments at 1; Low-Income Network Reply Comments at 1). The Low-Income Network suggests that the Department use a ratio to take into account the percentage of low-income customers in each Company's service territory when measuring Company performance on this metric (Low-Income Network Reply Comments at 2). The Low-Income Network recommends that the Department start to collect the appropriate data now to calculate the ratio in three years and implement the metric after that time (Low-Income Network Reply Comments at 1).

While the Companies support the Department's efforts to establish a Customer Credit Cases metric, the Companies recommend several modifications that they claim are necessary and appropriate for implementation of the metric (Companies Joint Second Reply Comments at 7).[63] The Companies contend that the definition of Customer Credit Cases is too broad (Companies Joint Reply Comments at 12-13). The Companies argue that the proposed definition will incorporate customers who are not low-income because the metric is categorized by call category instead of customer type (see e.g., CMA Initial Comments at 38; Liberty Utilities Initial Comments at 27). The Companies also argue that billing matters should be excluded from Customer Credit Cases (Companies Joint Second Reply Comments at 6-7).

The Companies also express concerns regarding data for this metric. First, the Companies argue that data from Companies with a higher low-income population may skew the benchmark (Companies Joint Second Reply Comments at 3-4, 7-8). Second, they question the

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[63] In the section on Customer Complaints above, we addressed the Companies' comments regarding prospective customers, certain exclusions including simple customer inquiries, those times when the company correctly applies applicable law, disputes associated with determining low-income eligibility, and the dispute process.

accuracy of a statewide benchmark based on data from 2011-2013 because during that time the Companies were not separately tracking Customer Credit Cases (CMA Initial Comments at 39-40; Liberty Utilities Initial Comments at 27-28; National Grid Initial Comments at 38; Companies Joint Reply Comments at 12; Berkshire Initial Comments at 11-12; Companies Joint Second Reply Comments at 4). The Companies request the convening of a Working Group to address data integrity, penalty structure and implementation timeline (Companies Joint Second Reply Comments at 3, 7-8).

3. Analysis and Findings

After consideration of all the information and comments, the Department modifies the proposed Customer Credit Cases metric, as described below. We disagree, however, with the Companies' argument that the definition of Customer Credit Cases is too broad because it will incorporate customers who are not low-income. The Department intends the new Customer Credit Cases metric to apply to all residential customers with credit complaints. While it is true that the Department seeks to assist those with economic need, credit concerns affect all income classes. For example, access to payment plans may affect any income class. Further, Customer Credit Cases have always made up a large percentage of the current SQ benchmark for Consumer Division Cases.[64] Therefore, Customer Credit Cases will measure all residential credit matters. [65]

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[64] Credit matters often approach one-third to one-half of the Consumer Division Cases per year for some companies. See, e.g., NSTAR RR-DPU-1.

[65] We note that billing matters are not considered Customer Credit Cases, and are included in the Customer Complaints metric.

The Department does, however, modify the benchmark and penalty formula. The Department acknowledges that the number of a Company's Customer Credit Cases is influenced by the percentage of low-income customers in each Company's service territory. To accommodate these differences, the revised SQ Guidelines now apply a company-specific fixed benchmark based on the average number of Customer Credit Cases recorded by the Department for the years 2011-2013, rather than a statewide benchmark. Therefore, the Customer Credit Cases metric uses the fixed company-specific Three-year Mean benchmarking method and penalty formula, including a company-specific Three-year Standard Deviation, as described in Section V of the revised SQ Guidelines. Companies are required to achieve a performance level equal to the company-specific Three-year Mean for the years 2011-2013; otherwise a penalty will apply.

Regarding the Low-Income Network's and the Companies' concern about the use of historical data, the Department notes that the Customer Credit Cases metric will be based on company-specific data that the Department recorded and provided to the Companies. Nevertheless, the Department recognizes the importance of shared confidence in the integrity of the data used to set benchmarks. Thus, the Department will allow a Working Group to validate the Department's 2011-2013 data and classifications. As discussed above, the Working Group will submit its recommendations regarding the Customer Credit Cases metric to the Department for its review and approval.

C. Service Appointments and Customer Service Guarantee

1. Introduction

The current SQ Guidelines for Service Appointments require each Company to meet a certain percentage of service appointments on the same day as originally scheduled. D.T.E. 04-116-C, Appendix 2007, at 6. The percentage is company-specific and based on each Company's historical performance. The current Service Appointments metric applies only to appointments that require the presence of the customer. D.T.E. 04-116-C, Appendix 2007, at 6. The current Service Appointments metric is penalty-eligible. The current SQ Guidelines also contain a Customer Service Guarantee ("CSG") that requires Companies to pay $50 to any customer whose service appointment was not met within the four hours scheduled. D.T.E. 04-116-C, Appendix 2007, at 21.

In D.P.U. 12-120-B, the Department proposed five amendments to the Service Appointments metric. First, the Department proposed to expand the scope of the Service Appointments metric to include all appointments, whether initiated by the customer or the Company and whether or not the customer must be present. D.P.U. 12-120-B, at 51. Second, the proposed metric requires the Companies to keep all appointments within a four-hour window. D.P.U. 12-120-B, at 52. Third, under the Department's proposal, service appointments that are rescheduled by the Company count as missed appointments unless the Company reschedules at least 48 hours in advance. D.P.U. 12-120-B, at 52. Fourth, under the proposal, Companies cannot exclude missed appointments on the ground that the Company made a phone call to the customer prior to arriving and the call was not answered; instead, the Company must arrive at the appointment location and leave a note. D.P.U. 12-120-B at 52. Fifth, the proposed Service

Appointments metric requires all Companies to keep 85 percent of their Service Appointments within the scheduled four-hour window. D.P.U. 12-120-B at 52. Additionally, the Department proposed to increase the CSG to $100 for each missed service appointment. D.P.U. 12-120-B at 53-54.

2. Summary of Comments

The Attorney General supports the Department's proposed changes to the Service Appointments metric to expand the scope to include all appointments, limit the appointment window to four hours, count rescheduled appointments as missed appointments if not rescheduled at least 48 hours in advance, and not allow an unanswered phone call to constitute notice of rescheduling (Attorney General Initial Comments at 8; Attorney General Second Reply Comments at 5-6). The Attorney General also argues that the 85 percent fixed statewide standard is reasonable (Attorney General Initial Comments at 8-9). The Attorney General supports increasing the CSG to $100for each missed service appointment (Attorney General Initial Comments at 9; Attorney General Second Reply Comments at 5). The Attorney General states that it would not be a burden for the Companies to meet the four-hour window or pay the CSG because the Companies are currently required to pay the CSG if an appointment is not met in a four-hour window (Attorney General Second Reply Comments at 6).

The Attorney General, however, recommends that the Department adopt only the increased customer protections for the Service Appointments metric that will have a meaningful impact on customers (Attorney General Second Reply Comments at 5). Accordingly, the Attorney General recommends two changes to the proposed Service Appointments metric. First, she recommends that the Department exclude from the Service Appointments metric appointments for which the customer does not have to be present (Attorney General Second Reply Comments at 6). Second, the Attorney General recommends that the Department exclude from the Service Appointments metric appointments for which the Company has made two "call ahead" calls and did not receive a response from the customer (Attorney General Second Reply Comments at 6).

The Companies state that they support the Department's effort to refine the Service Appointments metric, but argue that the proposed metric is not workable from either a technical or operational perspective (Companies Joint Second Reply Comments at 21, 25). Generally, the Companies argue that implementation of the Department's proposed metric will result in high costs being passed on to customers through higher rates, and will be detrimental to efficient operation of the Companies (Companies Joint Second Reply Comments at 26-27). The Companies also contend that the Service Appointments metric is problematic when combined with the changes proposed to the gas Odor Call Response metric (Companies Joint Second Reply Comments at 25). The Companies argue that the Odor Call Response metric implicitly requires Companies to position technicians across multiple geographic locations, which limits the Companies' ability to maintain available field technicians to handle service calls outside the assigned geographic area (Companies Joint Second Reply Comments at 25).[66] Implementation of both these elements together would require substantial increases in workforce resources, according to the Companies (Companies Joint Second Reply Comments at 25).

The Companies specifically challenge five main aspects the proposed metric: (1) the expansion of the metric to all appointments, regardless of whether the customer is required to be

[66] The Odor Call Response metric is described more fully in Section VI.

home for the appointment; (2) the four-hour window requirement; (3) the requirement of 48 hours notice for rescheduling; (4) the requirement that a technician must leave a note on the door if a customer is not there (rather than calling ahead); and (5) the 85 percent fixed benchmark (Companies Joint Second Reply Comments at 22-25). Unitil also requests clarification of the definition of Service Appointments (Unitil Initial Comments at 15).[67]

First, the Companies challenge expanding the metric to include all appointments, and argue that all "pre-scheduled" appointments should be included in the metric rather than all appointments (Companies Joint Second Reply Comments at 26).[68] Second, the Companies oppose the four-hour window requirement, arguing that it may lead to delayed service and greater customer inconvenience (Berkshire Initial Comments at 10-11; Liberty Utilities Initial Comments at 24). The Companies also contend that a significant system change is necessary to implement the proposed metric, including information technology ("IT") upgrades (National Grid Initial Comments at 35-36; CMA Initial Comments 36). The Companies also ask the Department to clarify whether "all day" appointments are permitted (see, e.g., Berkshire Initial Comments at 11), asserting that "all day" appointments increase flexibility for customers and are

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67 The Companies stated that exclusions in the current SQ Guidelines should apply, which would exclude same-day appointments, emergency work orders, tagalongs, multiple work orders for a single site, and work orders for which the utility has not scheduled a Service Appointment with the customer. The Companies also recommend adding credit turn-ons to the list of exclusions (Companies Second Reply Comments at 21.)

68 The Companies initially opposed the Department's proposal to include all appointments, whether or not the customer has to be present (see, e.g., Liberty Utilities Initial Comments at 23-14; Northeast Utilities Initial Comments at 44; National Grid Initial Comments at 44; Berkshire Gas Initial Comments at 10-11). In their Second Reply Comments at 26, the Companies supported revising the metric to include all "prescheduled appointments," regardless of whether the customer is required to be home for the appointment.

not inconvenient for customers that are home "all day" (Companies Joint Second Reply Comments at 23-24). The Companies maintain that they use the "all day" appointments to manage workload and accommodate customer requests for service (Companies Joint Second Reply Comments at 23). National Grid states that the proposed metric is inconsistent with the requirement for expedient response to emergency calls in the Odor Call Response metric (National Grid Initial Comments at 36). Unitil requests that Companies be permitted to submit requests to exclude certain data within 30 days of the end of the month (Unitil Initial Comments at 14-15).

Third, the Companies oppose the 48-hour rescheduling requirement (Berkshire Initial Comments at 10-11; CMA Initial Comments at 35; Liberty Utilities Initial Comments at 24-25; Northeast Utilities Initial Comments at 45). The Companies argue that it is not clear whether an appointment would be counted against the Company if a customer rescheduled the appointment within the 48-hour window (Berkshire Initial Comments at 10-11; CMA Initial Comments at 35; Liberty Utilities Initial Comments at 24-25; Northeast Utilities Initial Comments at 45). The Companies also argue that this requirement creates a disincentive for Companies to schedule or reschedule appointments in less than 48 hours (CMA Initial Comments at 35; Liberty Utilities Initial Comments at 24; Unitil Initial Comments, Brown Report at 15). The Companies also contend that rescheduling appointments 48 hours in advance of the appointment time is inappropriate and may lead to customer inconvenience because 25 percent or more of daily work is scheduled within 48 hours of the service appointment (Companies Joint Second Reply Comments at 24). According to the Companies, on some systems that percentage is as high as 50 percent (Companies Joint Second Reply Comments at 24). The Companies state that compliance with the proposed metric would require the Companies to spread customer appointments out over a longer timeframe (Companies Joint Second Reply Comments at 24). Northeast Utilities also argues that this requirement ignores the benefits of rescheduling appointments when severe weather is threatened (Northeast Utilities Initial Comments at 46).

Fourth, the Companies oppose the requirement that they must go to the customer's premises and leave a note, rather than excluding appointments when the Company makes a phone call to the customer prior to arriving at the customer's location and the call is not answered (Companies Joint Second Reply Comments at 24). The Companies contend that the requirement to actually go to the customer's premises to verify customer unavailability is inefficient and a waste of crew resources that would otherwise be used to address another service call (Companies Joint Second Reply Comments at 24). The Companies argue that the proposed requirement ignores the various means that the Companies have to coordinate with customers, and that the Companies have longstanding practices in place to make arrangements with customers at the time of scheduling to determine customer availability on the day of the service appointment (Companies Joint Second Reply Comments at 24-25).

Fifth, the Companies oppose the 85 percent threshold, stating that the 85 percent fixed benchmark is arbitrary (Companies Joint Second Reply Comments at 25). When they account for all of the changes encompassed in the Department's proposed Service Appointments metric, the Companies maintain that they do not have the necessary data and information to determine whether they can meet 85 percent of appointments within four hours (Companies Joint Second Reply Comments at 25).

Accordingly, the Companies recommend several alternatives to the Department's proposed Service Appointments metric. First, the Companies recommend the metric include all pre-scheduled appointments regardless of whether the customer is required to be home for the appointment (Companies Joint Second Reply Comments at 26). Second, the Companies recommend allowing the Companies to maintain their current service appointment windows, which are generally four-hour windows with the exception of the six-hour windows used by National Grid (Companies Joint Second Reply Comments at 26). The Companies also recommend allowing evening and "all day" appointments as a matter of customer convenience and operational efficiency (Companies Joint Second Reply Comments at 21, 23, 26). Third, the Companies recommend allowing them to reschedule appointments 24 hours in advance (Companies Second Reply Comments at 21, 26). Fourth, the Companies propose that each Company implement a "call ahead" protocol by January 1, 2016, with two staggered calls to confirm customer availability (or similar approaches) instead of requiring that a technician go to the customer's premises to confirm availability (Companies Joint Second Reply Comments at 21). The Companies recommend that, at the time of scheduling, the customer will have a choice as to the preferred mode of communication on the day of the service appointment (Companies Joint Second Reply Comments at 21). Under the Companies' alternative, they argue that there should be no missed appointment penalty where the selected protocol is followed by the Company (Companies Joint Second Reply Comments at 21, 26).

Fifth, with respect to the 85 percent benchmark, the Companies recommend that they be required to report data on the new Service Appointments metric in the years 2015 through 2017 to evaluate whether the performance benchmark of 85 percent and associated penalty structure are reasonable (Companies Joint Second Reply Comments at 26). The Companies propose that the penalty mechanism for the new metric be established as of January 1, 2018, based on the data collected from 2015 through 2017 (Companies Joint Second Reply Comments at 26). Under the Companies' proposal, the Department would retain the existing Service Appointments metric for penalty purposes until 2018 (Companies Joint Second Reply Comments at 21, 26). The Companies state that their recommended alternatives mitigate the cost impact and resource requirements associated with implementation of a new Service Appointments metric, while improving customer satisfaction (Companies Joint Second Reply Comments at 26).

With respect to the Department's proposed increase to the CSG, the Companies do not oppose increasing the CSG to $100 (Companies Joint Second Reply Comments at 21, 26). Berkshire argues, however, that any CSG payout should be subtracted from the penalty incurred for purposes of the penalty cap (Berkshire Initial Comments at 11). Unitil also argues that the CSG should not be owed for service appointments missed due to emergencies (Unitil Initial Comments at 14-15).

Finally, several Companies state that the proposed Service Appointments metric exposes the Companies to the possibility of incurring treble penalties for missing an appointment when also taking into consideration penalties for the First Call Resolution metric and the CSG fee (CMA Initial Comments at 36; Liberty Utilities Initial Comments at 25; National Grid Initial Comments at 37; Northeast Utilities Initial Comments at 46).

3. Analysis and Findings

Customers are often greatly inconvenienced when gas and electric companies do not keep service appointments. Customer appointments that are not kept also affect customers' confidence in the Companies. The Department proposed several revisions to the Service Appointments metric and was pleased to receive detailed and thoughtful responses and recommendations from the commenters. Each of the Department's proposed changes is addressed below. We also discuss the elements of the metric that we adopt as proposed in D.P.U. 12-120-B.

First, the Service Appointments metric will include all appointments, whether initiated by the customer or the Company, whether or not the customer must be present, and whether scheduled on the same day or in advance. When a Company misses a scheduled appointment, whether scheduled on the same day, the day before, or a week in advance, the customer is inconvenienced whether or not the customer's presence is required. For example, if a customer expects the Company to perform a certain service by the time the customer gets home, and the service is not completed, the customer is inconvenienced by both the lack of the service and having to reschedule the appointment. Therefore, the Department removes the exclusion for same day appointments that exists in the current SQ Guidelines and adopts the requirement that the Companies include all appointments, whenever scheduled, whether initiated by the customer or the Company, and whether or not the customer must be present, in their service quality reporting for the Service Appointments metric.

Second, the Department notes that all Companies currently maintain a four-hour window for appointments except for National Grid, which uses a six-hour window. The Department will require all Companies to maintain a four-hour window for service appointments,[69] whether the appointments are scheduled for the morning, the afternoon, the evening, or on the weekend. The

69 Of course, the Companies are free to offer shorter appointment windows to customers.

Department directs National Grid to implement a four-hour window for appointments consistent with this requirement. The Department agrees with the Companies that "all day" service appointments provide additional flexibility for customers and, therefore, Companies are permitted to retain the "all day" appointment windows on the condition that customers are first offered a four-hour window, and that the provision of "all day" appointments will reduce the availability of four-hour appointments or of customer service appointments, generally. All service appointments not met during the scheduled window, whether a four-hour appointment or an "all day" appointment, will count as missed appointments and must be included for reporting and penalty purposes in the new Service Appointments metric.

Third, the Department is persuaded by the Companies' arguments relating to the 48-hour rescheduling requirement. Going forward, the Companies will be required to reschedule service appointments at least 24 hours before the appointment time to avoid incurring a missed appointment. Service appointments that are rescheduled by a customer-initiated request within the 24-hour period do not count as missed appointments.

Fourth, the Department declines to adopt the Companies' and the Attorney General's proposal relating to calling ahead. Although the Department supports the Companies' "call ahead" practice, the practice should be implemented as a courtesy only, not as an alternative to actually arriving at a customer's premises. A customer may miss a telephone call, or two, for multiple reasons but still be available for the service appointment as scheduled. Companies are encouraged to implement a "call ahead" protocol, but must ultimately go to the customer's premises to determine whether the customer is available. The Companies shall leave written notice of their attempt at service if the customer is not present.

Fifth, the Department will modify its 85 percent benchmarking proposal. The Department will require Companies to collect data based on the new Service Appointments metric on a monthly basis for three years beginning January 1, 2015 until December 31, 2017. Companies shall report the number of four-hour appointments available, scheduled, and missed. Also, the Companies shall report the number of "all day" appointments available, scheduled, and missed. Companies shall report this data to the Department showing both monthly and annual totals with their annual SQ reports. The Department will review the three years of data to establish a benchmarking method and benchmarks at that time. The current penalty metric will remain in place until the new benchmarks are established for 2018.

Finally, no commenter opposed the increase in the CSG from $50 to $100 for each missed service appointment. The Department increases the CSG to $100 as proposed, with no exceptions. This change will be implemented on January 1, 2015.[70] The Department does not find the arguments relating to multiple penalties among the Service Appointments metric, the CSG, and the proposed FCR and EDB surveys to be persuasive. The CSG is not a penalty, but is intended to compensate customers for their lost time when a Company misses a service appointment. Additionally, to the extent that customers' responses in a survey are motivated by missed appointments, we do not view this as a double penalty, but as the fact that overall customer satisfaction is influenced by all of a customer's dealings with the utility Company.

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70 For purposes of the CSG, Companies shall use the definition of Service Appointment applicable to the new Service Appointments metric. See SQ Guidelines, at 6, 9-10.

D. Customer Satisfaction Surveys

1. Introduction

The current SQ Guidelines include two customer satisfaction surveys performed by each Gas and Electric Company: (1) a customer-specific survey whereby survey participants are randomly selected from all customers who have contacted the Company's customer service department during the year; and (2) a general residential customer survey whereby survey participants are randomly selected from all residential customers in the Company's service territory. D.T.E. 04-116-C, Appendix 2007, at 7-8. The customer-specific survey asks "How well did the customer service department of [your distribution Company] respond to your call?" and "How courteous was the customer service department of [your distribution Company]?" D.T.E. 04-116-C, Appendix 2007, at 7-8. The residential customer survey asks "How satisfied are you with the service, excluding price, that you are receiving from [your distribution Company]?"[71] D.T.E. 04-116-C, Appendix 2007, at 7-8. For each question customers are asked to rate their Gas or Electric Company on a scale from 1 (lowest) to 7 (highest). D.T.E. 04-116-C, Appendix 2007, at 7-8. The Companies report the survey results to the Department annually. See, e.g., Bay State Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-01 (Filing); Berkshire Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-02 (Filing); Blackstone Gas Company 2012 Service Quality Report, D.P.U. 13-SQ-03 (Filing). The current SQ Guidelines do not include a penalty tied to these surveys.

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[71] In 2006, the Department changed the wording of the residential survey to its present wording and reiterated that the survey is intended to gauge customer satisfaction for the services provided by each Company. D.T.E. 04-116-A at 5.

In D.P.U. 12-120-B at 48-49, the Department proposed two new penalty-eligible customer satisfaction survey metrics. First, the Department proposed the First Contact Response ("FCR") survey. With this survey, the Department sought to measure whether each customer's questions, concerns, or complaints were resolved in the first contact with the Company by asking the following question: "After your initial phone contact with a Company representative, did you have to contact the Company again to resolve your issue?" Under the proposal, respondents would answer "yes" or "no," and Companies would be required to achieve an annual average score of 80 percent for "no" answers in order to avoid penalties.[72]

Second, the Department proposed the Ease of Doing Business ("EDB") survey. With this survey, the Department sought to measure whether customers find working with the Company easy or difficult by asking the following question: "Using a scale of 1 to 10, where 1=Unacceptable, 5=Average, 10=Outstanding, how would you rate the ease of doing business with the Company?" Companies would be required to achieve an annual average score of eight to avoid penalties.[73] The Department also proposed to continue the current general residential customer survey, but not the current customer-specific survey, as a reporting requirement.

2. Summary of Comments

The Attorney General supports the Department's proposal to include customer satisfaction surveys as penalty-eligible metrics (Attorney General Initial Comments at 8). The Attorney General agrees that the proposed new customer satisfaction metrics for FCR and EDB

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[72] Under the proposal, the FCR survey would be conducted weekly with the results reported annually.

[73] Under the proposal, the EDB survey would be conducted, at a minimum, monthly, with the results reported annually.

are valuable (Attorney General Initial Comments at 8). The Attorney General recommends, however, that the Department use the Companies' results of the current customer surveys for penalty purposes, rather than using the new FCR and EDB metrics for penalty purposes (Attorney General Initial Comments at 8). The Attorney General reasons that the current surveys have a long historical record from which an appropriate standard may be set (Attorney General Initial Comments at 8). With respect to the proposed FCR and EDB metrics, the Attorney General recommends using them for informational purposes until such time as a standard may be confidently ascertained (Attorney General Initial Comments at 8).

The Companies do not support using surveys as penalty-eligible metrics because the Companies contend that customer satisfaction surveys are highly subjective, easily influenced by factors outside the Companies' control, and fail to provide the necessary information for the Companies to make meaningful changes that could improve their scores and, by extension, their customers' satisfaction (CMA Initial Comments at 27-28; Liberty Utilities Initial Comments at 20; National Grid Initial Comments at 28-29; Northeast Utilities Initial Comments at 38-39; Companies Reply Comments at 11-12). National Grid states that FCR and EDB should be used for reporting purposes only (National Grid Initial Comments at 29).

The Companies argue that the FCR and EDB metrics rely on highly subjective ratings and are technically flawed (Companies Joint Reply Comments at 11; Companies Joint Second Reply Comments at 10-11). The Companies identify technical flaws that they argue make the proposed FCR and EDB metrics unworkable (Companies Joint Reply Comments at 11; Companies Joint Second Reply Comments at 10-16). First, the Companies argue that the questions and measurement scales are not structured correctly (Companies Joint Second Reply

Comments at 14). Specifically, the Companies argue that the FCR metric improperly requires a customer to answer in the negative when the customer's issue was successfully resolved in the first contact (Companies Joint Second Reply Comments at 14). Also, the Companies argue that the scale of "1" to "10" for the EDB survey is inappropriate because customers are likely to consider "5" to be average or expected (Companies Joint Second Reply Comments at 14). Further, the proposed scale is different from the existing Residential Customer Satisfaction Survey which, the Companies argue, may confuse customers in attempting to indicate a high level of satisfaction in the survey (Companies Joint Second Reply Comments at 14). Also, Liberty Utilities argues that moving to a scale of 1 to 10 will render irrelevant any historical benchmarking data from the existing customer satisfaction surveys which are measured on a 1 to 7 scale (Liberty Utilities Initial Comments at 22).

A second technical issue with the FCR and EDB metrics, according to the Companies, is that the points of contact by customers have changed significantly with the introduction of digital technologies such as automated bill pay, which means that calls coming into the call center tend to be the more challenging customer inquiries (Northeast Utilities Initial Comments at 41; CMA Initial Comments at 30-31; Companies Joint Second Reply Comments at 15). The Companies contend that these calls are less likely to be resolved in one contact (CMA Initial Comments at 30-31; Northeast Utilities Initial Comments at 41). The Companies argue that excluding the categories of customer transactions that will not be resolved within a single contact is necessary for implementation of an FCR metric (Northeast Utilities Initial Comments at 41; Companies Joint Second Reply Comments at 16-17).

Third, the Companies argue that the surveys are not calibrated to compile the data points that would accurately and more objectively measure FCR and EDB (Companies Joint Second Reply Comments at 15). For example, they argue that customer perspectives can be affected by a broad range of external factors outside the Companies' control, including peak winter pricing, billing and collection prices, and tree-trimming policies (CMA Initial Comments at 27; Liberty Utilities Initial Comments at 20; Northeast Utilities Initial Comments at 38; Companies Joint Reply Comments at 11; Companies Joint Second Reply Comments at 15). If penalties are to be associated with these types of metrics, the Companies argue that appropriate calibration must include objective measurement points that are: (1) tailored to cover appropriate contact points or types of contact; and (2) have appropriate exclusions for circumstances that should not be captured in the metric (Companies Joint Second Reply Comments at 15-16).

The Companies also challenge the proposed benchmarks. Specifically, the Companies contend that a score of 80 percent or better on the FCR survey is not reasonably achievable because many of the issues about which the customers call the utility require multiple interactions to resolve (Companies Joint Second Reply Comments at 16). Further, the Companies argue that there is no other penalty threshold that can be validly imposed without first establishing the proper measurement method and evaluating potential performance in relation to the method (Companies Joint Second Reply Comments at 17).

For the EDB survey, the Companies argue that an average grade of "8" is not achievable, as it is unlikely that customers dealing with the Companies on EDB matters will score the Companies at "8" or higher (Companies Joint Second Reply Comments at 18). The Companies contend that implementing this metric through a call-center survey will inappropriately focus the

Companies' attention on narrow aspects of the business to avoid penalties, rather than providing an incentive to innovate and identify ways to better serve customers (Companies Joint Second Reply Comments at 18).

As an alternative to the Department's proposed FCR and EDB metrics, the Companies recommend that a working group be convened to identify and develop meaningful and appropriate customer satisfaction survey metrics (Companies Joint Second Reply Comments at 18). The Companies also recommend that implementation commence as of January 1, 2016, perhaps on an informal basis until sufficient data is collected (Companies Joint Second Reply Comments at 18-19). In the meantime, the Companies propose to maintain the existing penalty-eligible metrics for Telephone Answering and Meters Read on Cycle (Companies Joint Second Reply Comments at 19).

3. Analysis and Findings

Customer satisfaction surveys are a valid and important method of measuring customer satisfaction. See D.P.U. 12-120-B at 44-49; D.T.E. 99-84, at 14 (August 17, 2000). Surveys are a more direct and comprehensive method of capturing customer satisfaction than the current customer service penalty measures that capture how quickly phone calls were answered or how often meters were read. See D.P.U. 12-120-B at 47. For example, results of the general residential customer surveys have documented instances of dramatic drops in consumer satisfaction (see, e.g., Fitchburg Gas and Electric Light Company 2008 Service Quality Report, D.P.U. 09-18 (Filing); Fitchburg Gas and Electric Light Company 2009 Service Quality Report, D.P.U. 10-29 (Filing). Further, in the utility industry, surveys are used with significant frequency to gauge customer satisfaction with utility companies.[74] The Department's more than ten years of experience with surveys as part of the SQ program and the pervasive use of surveys in the utility industry support the use of customer satisfaction surveys as a penalty-eligible metric in the SQ Guidelines.

Based on the comments of the parties, however, we find that the proposed metrics for FCR and EDB may require some refining to ensure that they are sufficiently robust to accurately capture customer satisfaction for penalty purposes. At this time, therefore, the Department will adopt these surveys for reporting purposes only. The Working Group, as described above, will meet to refine questions as needed before Companies are required to include the FCR and EDB questions in their surveys. This Working Group will file the survey questions, with any revisions, for the Department's consideration. If accepted, the Department will require each Company to include the FCR question with the Company's customer-specific surveys and the EDB question with the Company's general residential customer surveys. Starting in 2017, each Company shall report the results of these surveys in its annual SQ report.

The Department adopts the current customer-specific survey and the general residential survey, described above, for penalty purposes. The current customer satisfaction surveys are appropriate for penalty purposes because the Department has at least seven years of data for the current surveys and can set a reasonable benchmark based on that data. Customer responses to the current customer satisfaction surveys have been relatively consistent for each Company as

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[74] As we noted in our proposal, customer satisfaction surveys are an integral method of doing business for the Companies, which often employ independent experts to perform surveys in addition to the Department's SQ surveys (Exhs. DPU-AG-1-3; DPU-BERK-2-29; DPU-BLACK-2-9; DPU-CMA-2-9; DPU-NEGC-2-9; DPU-NGRID-2-9; DPU-NU-2-9; DPU-FGE- 2-9).

well as across both Gas[75] and Electric[76] companies over the past seven to ten years.[77] The consistency in the data also belies the argument that scores are highly influenced by outside factors. In addition, data from the existing surveys supports the benchmark we set here.

The customer satisfaction survey metric will be subject to a fixed benchmarking method. Each Company's yearly performance measurement will constitute the average of both surveys (i.e., all three questions). Penalties will be assessed if a Company's average survey results are less than "5" and the maximum penalty will be assessed if a Company scores "4" or below. The Department finds that an average "5" out of "7" represents a minimum level of appropriate customer satisfaction. This metric will be implemented on January 1, 2015. The Companies'

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75 For example, from 2002 – 2013, CMA's annual average scores ranged from 5.9 to 6.3 for the general residential survey and 6.1 to 6.8 on the customer-specific survey (Bay State Gas Company 2013 Service Quality Report, D.P.U. 14-SQ-01, Filing at § 2). From 2004 to 2013, the National Grid Gas Companies' (Boston Gas, Essex Gas, and Colonial) annual average scores ranged from 5.9 to 6.3 for the general residential survey and 6.1 to 6.4 (from 2007 – 2013) for the customer-specific survey (Exh. RR-NGRID-DPU-3, Att. A). From 2007 – 2012, Berkshire Gas's annual average scores ranged from 6.2 to 6.5 for the general residential survey and 5.9 to 6.5 on the customer-specific survey (Berkshire Gas Company 2013 Service Quality Report, D.P.U. 14-SQ-02, Filing at II-13). From 2002 – 2013, Blackstone Gas's annual average scores ranged from 6.2 to 6.6 for the general residential survey and 6.4 to 6.9 on the customer-specific survey (Berkshire Gas Company 2013 Service Quality Report, D.P.U. 14-SQ-03, Filing at 18-19).

76 For example, from 2004 to 2013, the National Grid Electric Companies' annual average scores ranged from 5.8 to 6.2 for the general residential survey and 6.1 to 6.6 (from 2007-2013) for the customer-specific survey (Exh. RR-NGRID-DPU-3, Att. B). From 2004 to 2013, WMECo' annual average scores ranged from 5.8 to 6.6 for the general residential survey and 5.8 to 6.6 (from 2007-2013) for the customer-specific survey (Western Massachusetts Electric Company 2013 Service Quality Report, D.P.U. 14-SQ-14, Filing at § IV).

77 The exception to this is Unitil. From 2002-2013, Unitil's annual average scores ranged from 3.5 to 5.3 for the general residential survey and 4.0 to 6.1 on the customer-specific survey (Fitchburg Gas and Electric Light Company 2013 Service Quality Report, D.P.U. 14-SQ-04, Filing at 16).

current survey results demonstrate that an average score of "5" or better is also reasonably achievable by the Companies. The Companies shall continue to report their average scores for each of the three questions as well as an overall average for all three questions with their annual SQ reports.

E. Telephone Answering, Billing Adjustments, and Meter Reading

1. Introduction

The current SQ Guidelines contain penalty-eligible metrics for Telephone Answering, Billing Adjustments, and Meter Reading. D.T.E. 04-116-C, Appendix 2007, at 5-7. Under the current Telephone Answering metric, each Company must achieve a certain percentage of phone calls answered within 20 seconds. D.T.E. 04-116-C, Appendix 2007, at 5-6. Under the current Billing Adjustments metric, each Company must experience less than a certain number of residential billing disputes per 1,000 residential customers. D.T.E. 04-116-C, Appendix 2007, at 7. Under the current Meter Reading metric, each Company must read a certain percentage of meters on a monthly basis. D.T.E. 04-116-C, Appendix 2007, at 6. In D.P.U. 12-120-B, the Department proposed to eliminate the metrics for Telephone Answering, Billing Adjustments, and Meter Reading. D.P.U. 12-120-B at 44.

2. Summary of Comments

The Attorney General supports eliminating the Telephone Answering, Billing Adjustments, and Meter Reading metrics from the penalty structure of the Service Quality Guidelines (Attorney General Initial Comments at 8). The Attorney General recommends retaining the metrics as reporting requirements, however, because it is likely that Companies need to continue to monitor their performance in these areas (Attorney General Initial Comments at 8). The Attorney General states that eliminating these metrics, even as reporting requirements, may lead to deterioration in the Companies' performance (Attorney General Initial Comments at 8).

The Companies recommend maintaining the Telephone Answering metric in lieu of the First Contact Response metric the Department proposed (National Grid Initial Comments at 34; Northeast Utilities Initial Comments at 44; Companies Joint Reply Comments at 11). Most of the Companies acknowledge that because meter readings have become automated that the Meter Reading metric may no longer be informative and could be eliminated (Companies Joint Reply Comments at 11).

Unitil objects to the elimination of the Telephone Answering, Billing Adjustments, and Meter Reading metrics (Unitil Initial Comments at 5). Unitil argues that these metrics are objective measures of customer service, as opposed to surveys, complaints, and credit cases (Unitil Initial Comments at 5). Unitil claims that it is important to retain such objective measures as a balance and a means to show that the Companies are appropriately managing their customer service responsibilities (Unitil Initial Comments at 5).

3. Analysis and Findings

In D.T.E. 99-84, the Department instituted the Telephone Answering, Billing Adjustments, and Meter Reading metrics in order to measure customer service. Driven largely by technological advances, most Companies' performance in these metrics has improved to service levels set by the Department when these metrics were instituted. Further, customer expectations for customer service go beyond how long it takes for customer calls to be picked up or how often customers' meters are read, especially given that these functions are now largely automated. In addition, many of the Companies noted that customers are increasingly favoring other forms of contact, such as the internet and automated bill paying, over telephone contact (Northeast Utilities Initial Comments at 41; CMA Initial Comments at 30; Companies Joint Second Reply Comments at 15). Customers' problems with telephone service, meter reading, and billing will be counted in the Customer Complaints and Customer Credit Cases metric. For these reasons, the Department will eliminate the three metrics from the SQ Guidelines.

With respect to the Attorney General's concern that eliminating these metrics completely may lead to deterioration in the Companies' performance, the Department will monitor Company performance by way of the new penalty-eligible metrics for Customer Satisfaction Surveys, Customer Complaints, and Customer Credit Cases. For example, the Residential Customer Survey asks "…how satisfied are you with the service, excluding price, you are receiving from [Company Name]." It is unlikely that a Company that fails to answer the phone or is sending out incorrect bills would receive high ratings. More importantly, the Customer Complaints metric will specifically identify callers who complain about a Company's telephone answering and billing practices. Any increase in calls complaining about a Company's telephone answering or billing accuracy will be noted on a monthly, as well as yearly basis, and can be investigated further by the Department, if necessary.

IX. ROUNDING MEASURED AND REPORTED VALUES

A. Rounding Measured and Reported Values

1. Introduction

The existing SQ Guidelines prescribe a specific method for rounding measured and reported performance values associated with various SQ metrics. D.T.E. 04-116-C, Appendix 2007, at 13-16. In D.P.U. 12-120-B, the Department did not propose changes to the rounding method. In their comments, however, some of the Companies requested that the Department make changes to the way numbers are currently rounded for SQ purposes. This section addresses the Companies' request.

2. Summary of Comments

National Grid recommends that the Department allow Gas and Electric Companies to calculate their SQ performance to whatever decimal place is necessary to ensure accuracy and eliminate rounding to avoid undue penalties associated with imprecise data (National Grid Initial Comments at 11). Northeast Utilities specifically requests that the Department adopt a practice that does not call for the rounding of data at multiple stages of the performance data computation (Northeast Utilities Initial Comments at 24). Northeast Utilities further states that when the raw data used at each stage in the calculation is rounded, a substantial margin of imprecision is embedded in the resulting data points (Northeast Utilities Initial Comments at 24).

3. Analysis and Findings

As part of SQ measurement and reporting, the Department has always required rounding measured and reported values to the 10^{th}, 100^{th}, or 1000^{th} decimal places depending on the metric. D.T.E. 04-116-C, Appendix 2007, at 13-16; see also Electric Companies 2010 Service Quality Reports, D.P.U. 11-SQ-10 through 11-SQ-14 (2013) (Department confirms rounding rules). The SQ Guidelines are intended to measure Company performance and real customer experiences. We find that rounding of final performance figures is necessary to ensure accuracy and consistency in how we calculate penalties for all Companies, as well as for efficiency in reviewing data. Therefore, we decline to eliminate rounding altogether. Although the Companies have not shown that the existing rounding requirements have ever resulted in undue penalties, we agree with the Companies that rounding or limiting the values that are inputted for a calculation introduces the possibility of less accurate calculated results.[78] We will, therefore, differentiate between rounding requirements for the input values and the calculated performance results, to ensure that calculated results are as accurate as possible. We have asked that Companies use Excel when providing data to the Department. Because Excel automatically truncates the data, the Companies shall use data automatically truncated by Excel for all calculations. The Department directs the Companies not to further round the raw data used at each stage in the calculation. The Department will, however, require that the calculated performance results of all metrics be reported to 1000th decimal places, three places after the decimal point. Similarly, all values entered in the penalty formula shall be rounded to the 1000th decimal point. These directives on rounding create a uniform requirement, and will enhance the accuracy of metrics that have been rounded to fewer decimal places under the current SQ Guidelines.

78 We point out that there is an equal chance that rounding increases or decreases the calculated result, therefore increasing or decreasing the chance of a penalty over time. Additionally, we note that the potential differences in penalties due to rounding are small compared to the total penalty value. For example, if a Company were to incur a $5,000,000 penalty in SAIFI, the potential error for a recorded SAIFI value of 1.055 versus 1.05449 would be about $2,418.23.

X. DELETION OF REPORTING REQUIREMENTS

A. Introduction

The Department proposed to delete the following reporting requirements from the current SQ Guidelines: (1) the designation of service territory, (2) the vegetation management policy, (3) the spare component and inventory policy reporting requirements; and (4) damage to company property. The Department also proposed to delete the staffing levels requirement. D.P.U. 12-120-B at 63-64.

1. Summary of Comments

The Attorney General supports deletion of the designation of service territory, the vegetation management policy, the spare component and inventory policy, and damage to Company property reporting requirements (Attorney General Initial Comments at 10).[79]

The Companies support deletion of the staffing levels reporting requirement (Companies Joint Reply Comments at 14).[80] The Companies argue that there is no benefit to continued reporting on this metric because staffing level changes will occur over time due to the implementation of technology advancements, corporate reorganizations, revisions to job specifications, the use of outsourcing options to control costs, and other factors rendering the comparison of staffing data across long periods of time meaningless (Companies Joint Reply Comments at 14). NEGWA and the Steelworkers Union oppose deletion of the staffing levels metric without institution of a substitute metric or review process (NEGWA Initial Comments at

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[79] The Attorney General did not comment on deletion of the staffing levels reporting requirement.

[80] The Companies did not comment on deletion of the designation of service territory, the vegetation management policy, the spare component and inventory policy, and damage to Company property reporting requirements,

1-2; Steelworkers Union Initial Comments at 4). NEGWA argues that the increased stringency of the SQ Guidelines is not enough to encourage adequate staffing, especially if a Company decides that paying a penalty is worth avoiding the staffing costs (NEGWA Initial Comments at 1-2). The Steelworkers Union argues that the Companies may simply hire temporary workers or contract out work for short periods when their in-house workforces are stretched thin (Steelworkers Union Initial Comments at 4).

2. Analysis and Findings

In D.P.U. 12-120-B at 63, the Department stated that the designation of service territory, the vegetation management policy, and the spare component and inventory policy reporting requirements are not annual performance measures but, rather, company-specific policies that the Department can review outside the SQ program. Regarding damage to company property reporting, the Department noted that (1) more comprehensive information related to gas line damage is reported to the Department as required by the Dig Safe law, making this information in the SQ reports superfluous; and (2) the Pipeline Safety Division can also investigate damage and penalize Companies, if necessary. See G.L. c. 82, § 40; 220 C.M.R. § 99.01; 220 C.M.R. §§ 99.07 - 99.12. For these reasons, the Department adopts our proposal to delete the reporting requirements in SQ filings for designation of service territory, the vegetation management policy, the spare component and inventory policy, and damage to company property. See D.P.U. 12-120-B at 63-64. The Department, however, directs the Companies to file their vegetation management policies with their Annual Reliability Reports.

Regarding the staffing level reporting requirement, the Department continues to find that the staffing level metric is no longer necessary as the Department moves away from performance based ratemaking. See D.P.U. 12-120-B at 64. In response to NEGWA's and the Steelworkers Union's concerns, the Department expects that the removal of offsets, in addition to the increased stringency of the SQ Guidelines and the potential for penalties, should motivate the Companies to provide adequate staffing to meet the benchmarks on all SQ metrics.

XI. IMPLEMENTATION AND CONCLUSION

A. Introduction

In D.P.U. 12-120-B at 65, the Department proposed to implement revised SQ Guidelines as of January 1, 2015.

B. Summary of Comments

The Attorney General supports an implementation date of January 1, 2015 for the new SQ Guidelines, arguing that the Companies should be able to meet the standard for SAIDI and SAIFI because the Companies are already performing at the statewide average (Attorney General Reply Comments at 26-27). The Companies contend, however, that the proposed timeline is impractical and inadvisable given the number and extent of changes required for compliance with an entirely different service quality program (Northeast Utilities Initial Comments at 19-20; Companies Joint Reply Comments at 3). The Companies and the Low-Income network recommend that the Companies begin data collection in 2015, but that the Department stay implementation of penalties for three years for all metrics (Companies Reply Comments at 3, citing Low-Income Network Initial Comments at 2). The Companies further assert that the Department has not explained how it is reasonable or appropriate to forego the ramp-up period allowed in prior proceedings (Companies Reply Comments at 3, citing D.P.U. 99-84 SQ Guidelines, § I.C; D.T.E. 04-116-C Appendix 2007). After the technical sessions, the

Companies suggested revisions to all of the Department's proposed penalty-eligible metrics and suggested implementation dates for each of the metrics, shown in the chart below (Companies Joint Second Reply Comments). The implementation dates for the Companies' proposed, revised metrics include:

<u>Companies' Implementation Date Proposals</u>

Metric	Companies' Implementation Date Proposal
Customer Complaints	January 1, 2018, after three years of data collection if including commercial and industrial complaints. Otherwise, 2016. (Companies Joint Second Reply Comments at 7-8)
Customer Credit Cases	January 1, 2016 (Companies Joint Second Reply Comments at 7-8)
FCR/EDB	January 1, 2016, for reporting purposes only (Companies Joint Second Reply Comments at 18-19)
Service Appointments	January 1, 2018, after three years of data collection. (Companies Joint Second Reply Comments at 27)
Odor Call Response	January 1, 2015 (Companies Joint Second Reply Comments at 28, 32)
Lost-Work Time Accident Rate	January 1, 2016 (Companies Joint Second Reply Comments at 35)
SAIDI/SAIFI	January 1, 2019 (Companies Joint Second Reply Comments at 36, 42-43)
CKAIDI/CKAIFI	January 1, 2015 (Companies Joint Second Reply Comments at 46)
Downed-Wire Response	To be set by working group (Companies Joint Second Reply Comments at 52)

C. <u>Analysis and Findings</u>

The Department adopts the new SQ Guidelines, effective as of January 1, 2015, with some metrics to be fully implemented in 2016 and 2018. As more fully described in the sections for each metric, we considered the Companies' arguments relating to implementation dates and operations capabilities to inform our determination of the implementation schedule. In many instances, we have adopted the Companies' proposed implementation dates. In some instances, for example, SAIDI and SAIFI, we do not adopt the Companies' requested implementation dates because the revisions made to the proposed metric provide the Companies with ample ramp-up time. The charts at the end of this Order show the implementation date for each metric.[81]

D. Conclusion

The Department will convene the Customer Satisfaction Metrics Working Group shortly after this Order issues. At that time, the Department will provide more detailed information about the tasks and deadlines the Working Group will be charged with completing. Companies shall file revised SQ plans consistent with the SQ Guidelines adopted in and attached to this Order. Finally, consistent with our past practice, the Department intends to review the SQ program in five years.

81 We note that some metrics will become effective first as reporting metrics, and later as penalty-eligible metrics. As noted, metrics adopted in D.T.E. 04-116-C will apply in the meantime, for penalty purposes.

Implementation Dates for SQ Guidelines Adopted in D.P.U. 12-120-C

January 1, 2015		
Metric	**Reporting/Penalty**	**Notes**
Customer Complaints	Reporting	• Companies must begin tracking and reporting data consistent with the new Customer Complaints. • Companies must begin tracking and reporting C&I complaint data separately. • The Consumer Division Cases metric, established in D.T.E. 04-116-C, will remain effective in 2015 for penalty purposes.
Customer Credit Cases	Reporting	• Companies must begin tracking and reporting data consistent with the new Customer Credit Cases metric beginning January 1, 2015. • The Consumer Division Cases metric, established in D.T.E. 04-116-C, will remain effective in 2015 for penalty purposes.
Service Appointments	Reporting	• The Service Appointments metric, established in D.T.E. 04-116-C, will remain effective from 2015-2017 for penalty purposes. • Companies must track and report data consistent with new metric in 2015-2017, for reporting purposes
Customer Satisfaction Surveys	Penalty-eligible	
Customer Service Guarantee	Fee to Customers	
Odor Call Response	Penalty-eligible	
Odor Call Response Time Exceeded	Reporting	

January 1, 2015		
Metric	**Reporting/Penalty**	**Notes**
Odor Call Response Time Increments	Reporting	
Odor Call Response Override	Reporting	
Lost-Work Time Accident Rate/Restricted Work Day	Reporting	
SAIDI/SAIFI	Penalty-eligible	
CKAIDI/ CKAIFI	Penalty-eligible	
Line Losses	Reporting	
MAIFI	Reporting	
CEMI/ CELID	Reporting	
Downed-Wire Response	Reporting	• Companies must begin tracking and reporting data consistent with the new Downed-Wire Response metric beginning January 1, 2015.

Implementation Dates for SQ Guidelines Adopted in D.P.U. 12-120-C

January 1, 2016		
Metric	**Reporting/Penalty**	**Notes**
Customer Complaints (minus C&I)	Penalty-eligible	• Companies shall continue to report C&I data, which will not be included in the penalty.
Customer Credit Cases	Penalty-eligible	
FCR/EDB	Reporting	
Downed-Wire Response	Penalty-eligible	

January 1, 2018		
Metric	**Reporting/Penalty**	**Notes**
Service Appointments	Penalty-eligible	
Customer Complaints	Penalty-eligible	• C&I complaints will be included in the new Customer Complaints metric as of January 1, 2018, for penalty purposes

XII. ORDER

Accordingly, after due consideration it is:

ORDERED: That the final Service Quality Guidelines attached to this Order are hereby ADOPTED; and it is

FURTHER ORDERED: That the Massachusetts Electric Company and Nantucket Electric Company, Boston Gas Company, and Colonial Gas Company d/b/a National Grid, NSTAR Electric Company, NSTAR Gas Company, and Western Massachusetts Electric Company d/b/a Northeast Utilities, Fitchburg Gas and Electric Light Company d/b/a Unitil, Bay State Gas Company d/b/a Columbia Gas of Massachusetts, Liberty Utilities (New England Natural Gas Company) Corp., The Berkshire Gas Company, and Blackstone Gas Company shall file Service Quality Plans consistent with these Service Quality Guidelines, within 60 days of this Order, for Department review and approval.

By Order of the Department,

/s/
Ann G. Berwick, Chair

/s/
Jolette A. Westbrook, Commissioner

/s/
Kate McKeever, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.